THE LINGUISTIC HISTORY OF SISUUMBWA, KISUKUMA AND KINYAMWEEZI IN BANTU ZONE F

CENTRE FOR NEWFOUNDLAND STUDIES

TOTAL OF 10 PAGES ONLY MAY BE XEROXED

(Without Author's Permission)

BALLA F.Y.P. MASELE

001311

CENTRE FOR NFLD. STUDIES
MEMORIAL UNIVERSITY
OF NEWFOUNDLAND

THE LINGUISTIC HISTORY OF SISUUMBWA, KISUKUMA AND KINYAMWEEZI IN BANTU ZONE F

By

Balla F.Y.P. Masele

A thesis submitted to the School of Graduate Studies in partial fulfilment of the requirements for the degree of Doctor of Philosophy

Department of Linguistics

Memorial University of Newfoundland

July 2001

St John's Newfoundland

ABSTRACT

This research describes the linguistic history of SiSúúmbwà (F23), KìSùkúmà (F21) and KìNyàmwéézi (F22) (henceforth SSN). Two areas are investigated, phonology and vocabulary. In phonology, the comparative method is used, focussing on five processes: Bantu Spirantization (BS); seven to five vowel system reduction (7 > 5); Dahl's Law (DL); glottalization; and voiceless nasal formation. Vocabulary is used to examine quantitative and qualitative evidence. Quantitative evidence uses lexicostatistics to determine lexical retention and sub-grouping. The comparative method is employed in analysing shared lexical innovation as a measure of qualitative evidence, and hence genetic relationship.

In SSN, the varieties investigated are ten: SìSúúmbwà (F23): SìSilòòmbó (F23a), SìYòómbé (F23b), and KiLòòŋgò (F23c); KìSùkúmà (F21): KìmùnàSùkùmà (F21a), GìnàNtùzù) (F21b), JinàKìÌyâ (F21c); and KìNyàmwéézi (F22): KìNyànyèèmbè (F22a), KìDàkámà (F22b), SiGàlàgàànzà (F22d) and KɪKònòòŋgò (F22e). SSN is part of Guthrie's (1967-1971) Bantu Zone F. The rest of Zone F languages are also discussed for comparison: KiTòòŋgwè/ KiBèèndè (F10), KìKíímbǒ (F24), ìCìWǒǒŋgǒ (F25), KìnìLàámbà (F31), KìRìmi (F32), KiiRàŋgi (F33) and KèèMbùwè (F34).

The contact models of language development after Thomason and Kaufman (1988) are used, while the family tree model illustrates the results of lexicostatistics.

The analysis of the data and historical interpretation of the linguistic patterns suggest that Zone F is a result of linguistic convergence by geographical adjacency. Guthrie (1948:73) asserts that the zones are mainly geographical entities. But using linguistic criteria to group them implies that they are also linguistic and hence genetically valid (Guthrie 1948:23, 1967:46-47). For instance, BS is found in F10 and F23 only; DL in F21 and F22b only, and not in the rest of Zone F, including the core of KìNyàmwéézi (F22a, F22d, F22e). Glottalization is found mainly in F23. In the rest, especially F21 and F22, borrowing is suggested, by evidence of double reflexes: Proto Bantu *p → /p/ and /h/. Voiceless nasalization is also found in the DL languages only, F21 and F22b. Most of the lexical innovations are not unique to Zone F. They are areal, shared by other zones. Combined with the phonological facts, this suggests the death of linguistic Zone F.

ACKNOWLEDGEMENTS

Many people facilitated in various ways in the completion of this project, in their personal and/or official capacities, sometimes their permanent contributions and influences stretching years back. I will mention only a few. The crucial role played by those I do not mention for any reason is unforgettable: as elsewhere, some of their impressions are discernible in the following pages, while some of their far-reaching impact is only felt, invisible. However, the final result and especially its faults are entirely my interpretation and assimilation of their input. Among these are Derek Nurse, my supervisor, who absorbed all the major earthquakes; Marguerite MacKenzie, Head of the Department of Linguistics, Memorial University of Newfoundland (MUN); Sandra Clarke, Irene Mazurkewich, Sandra Clarke, Carrie Dyck, Aleksandra Steinbergs, Vit Bubenik, Harold Paddock, Philip Branigan, John Hewson and James Black, all professors in the Department of Linguistics, MUN; Gregory S. Kealey, the Dean of the School of Graduate Studies, MUN, for his dedication in paying close attention to individual graduate student concerns beyond the call of duty; Sarah Rose; Christa Beaudoin-Lietz; Evelyne Namaemba Kisembe for clarification with Luβukusu and Luhya in general; Jana Novotna, for her insightful comments in typology and morphology; Douglas Wharram, who was ready to be there, even in emergencies like that day; Linda Harris, Jane Bannister, Laurel-Anne Hasler, Susan Mugford, Anna Muselius, Amanda Newhook, Tracy O'Brien, Dawn Richards, Chris Wood, Mark Scott; Coster P. Mahuwi for his cartographic services at the University of Dar Es Salaam; Dean O'Reilly for help with the maps with MapInfo; Jouni Maho, for his work on revised Guthrie; Irene Zadnik of the House of Solutions, Faculty of Arts, MUN, for her role in disentangling the frequent computer software glitches (especially of word processing) which kept me sleepless; Colleen Porter, of the Linguistics Department, MUN, for being there to handle all the hassles of theses, at short notice; Darren Newton and Brenda Kitchen of the GSU, for their presence.

I thank the School of Graduate Studies, Memorial University of Newfoundland and the Directorate of Postgraduate Studies, University of Dar Es Salaam for their financial and moral support, especially during the most trying moments of my studies. The people in various responsibilities there made a lot of difference in several impossible situations.

The following deserve my appreciation for the data, ideas and/or their stabilizing influence in various ways: Joseph Kulwa (KIDakama); Florian Kimolo and Michael Kimolo (KiiRaŋgi); Magreth βUsheesha (JinaKIIya); Gasiano Sumbai (GiAhi); Mikael F. Hadu and Jeremia Nyampala (GIRwana); Herbert Makoye and Jared DUUhU (KImunaSukuma); Ally Rashid and Emmanuel Mbogo (KIKIImbU -South); Hamis Mpume (ɣInyaMunyiŋanyi); Lucas Mzelela and Peter Kasele (KiNyanyeembe); Barthazar Benedicto (SiSiloombo); Beatus Benedictus Mlando (SiYoombe); Madaalo Nzuumbi and Sigeela (GInaNtuzu), Erick Zakayo (KIKonoongo); Alfred MdIIma, (KInILaamba (Central)); Samwel M. Salija (KInIHaanzu); Mariam B. Kakili (KInaUshoola); Hawa Saidi (SiGalagaanza); Gervas Magogozwa

(KiLooŋgo); Peter Mwansoko (KɪKɪɪmbʊ North); Flourine Francis (KeeMbuwe); Kapepwa I. Tambila (or properly Táámbilá) (KiBende/KiTooŋgwe); Kidyamali Msago (ɪCɪWʊʊŋgʊ); ɣòlíxʊ̀ Màlàjà of Mitóó, Manyoni, for his clarifications with GiÀhí when the first draft of the data was being edited; Joseph L. Mbele and Heribertha Mbele for clarifications with KiMatengo. Henry R.T. Muzale; Saida Yahya-Othman; H.J.M. Mwansoko; Justinian C. Galabawa;; Gertrude N. Malai; Joseph K. Kyobe; Lameck Masele Lʊtoonja; Naamhala Thobias βʊsɪga Seembo; Kulikoyela Kahigi; Nathan Ogechi; L.K. Kingalu, E. Lyagala; Sumanta Buana; Eginald P.A.N. Mihanjo; Wing Hendrorasetyo; Miklós Krész, Judit Tóth; Kevin Cassell; Melissa and Michael Regular; Jacqueline Carey; Charles Chonza; Rose Sallema; Richard Kangalawe; Sufian Bukurura; Cyril August Chami; Jerome Beaudoin; Lawrence Greening; Mohamed Uvuruge; Elikana Daudi Nyolooβi; Wajira Srinanda Rathnayake; Anthonia Mwapili na Wachanja Mbuga Wengine Wote; Hamza Mustafa Njozi; Elias Manandi Songooyi for the inspiration from earlier on; Thomas Kaloki Nzyimi; Adam Korogoto; Aldin Kaizilege Mutembei; Gamba Nkwengulila; Mwita Charles Tete; Juma Manyama Warioba; Hadija Maggid Mchatta; Ng'wanaáNsamăka, for his role of reminding and impressing on me about doing something about these languages, especially KɪSukuma, although we met only once in 1993. The Tygr CP Group, for giving direction when sections of our data made no sense; Ernest Kahindi, for availing me a linguistic work which inspired me; Peter Manyama Kairanya, for his inspiration in writing a people's history; Palʊlă ŋwanIpóóndéjo, Masanja Palʊlă, Elisha Zeeŋgo Masele for their dedication in times of our greatest need during the formative years; Kuumbă ŋwanămhíiya ŋkʊβâ; James Pyaágʊ Lʊjigă; Joseph Goleha; Daudi Elias Nyaŋgɪndʊ; Gaándɪ Magíma; ŋwaandʊ̌ Masanja; Tumai Chandalʊ̌βa; Alfred Mbooje; Mataalʊ Sheeli Gaamba; Patrice ŋkoβa; Maalwâ Masele and her family, who constantly reminded me of duty in diversity; Tambílíja Masele who waited, but the days turned into years and he had to remind us of time. Pagatĭ and his family; Zeeŋgo Seembeiiwe Masele; Shiida Ng'wanăGabáádi and her family; Geenî Ng'wanăNgʊsă.

Hoogâ, Shiijâ, Madina, Hussein, Hassan (also called Wananchi), for their exemplary care, understanding and discipline in the face of long absenteeism in the family; Kulwa βʊgʊlɪ; Masele Ng'wanăSaayî, for growing up too quickly because of massive responsibilities of keeping our extended family in Ng'walaala functioning, despite his tender chronological age.

My mother, Kwaaŋgʊ̂ Ng'wanăGabáádi, for disappointing her almost always in many ways, with the pipelining of dreams of a better tomorrow, which never arrived and had no intention of arriving. She has been there for me.

TABLE OF CONTENTS

Page

TABLE OF CONTENTS Page

TABLE OF CONTENTS Page

TABLE OF CONTENTS Page

TABLE OF CONTENTS Page

TABLE OF CONTENTS Page

TABLE OF CONTENTS Page

TABLE OF CONTENTS Page

TABLE OF CONTENTS Page

TABLE OF CONTENTS

LIST OF TABLES

LIST OF TABLES Page

LIST OF TABLES Page

LIST OF TABLES Page

LIST OF FIGURES Page

LIST OF MAPS Page

LIST OF ABBREVIATIONS, SYMBOLS AND DEFINITIONS

(i) Abbreviations and symbols

<kɪɪya>	= grapheme	< > graphic representation
[kɪɪya]	= phone	[ ] phonetic representation
/kɪɪya/	= phoneme	/ / phonemic representation
{kɪɪya}	= morpheme	{ } morphemic representation

>	= becomes, goes to (diachronic process/derivation)
<	= comes from, derives from (diachronic change)
→	= is realized as (synchronic derivation)
PB *x	= Proto Bantu reconstruction, mainly by Guthrie (x = any word)
?	= unconfirmed, uncertain or doubtful case
σ	= syllable
$\sigma_{\circ}$	= any number of syllables
C	= any consonant
V	= any vowel
+	= syllable boundary
;	= separating different forms of a lexeme or concepts in different languages (Chapter 4)
cf	= compare with these forms, which may be related or not (Chapter 4)
[ ]	= enclosing languages which do not form the complete set (Chapter 4)
( )	= enclosing related languages being compared to the rest (Chapter 4)
:	= explanation follows, especially type of innovation (Chapter 4)
vi	intransitive verb
vt	transitive verb
p.c.	= personal communication

Si	= SiSiloombo, SiSilòòmbò (F23a)
Yo	= SiYoombe, SiYòòmbé (F23b)
Lo	= KiLooŋgo, KiLòòŋgò (F23c)
Su	= KɪmunaSukuma, KɪmùnàSùkùmà (F21a)
Nt	= GɪnaNtuzu, GɪnàNtùzù (also GɪmùnàNtùzù) (F21b)
Ki	= JinaKɪɪya, JinàKɪɪyâ (also JimùnàKɪɪyâ) (F21c)
Da	= KɪDakama, KɪDàkámà (F22b)
Ny	= KɪNyanyeembe, KɪnyàNyèèmbé (F22a)
Ko	= KɪKonooŋgo, KɪKònòòŋgò (F22e)
Ga	= SiGalagaanza, SiGàlàgàànzà (F22d)
Be	= KiBende/KiToŋgwe, KiTòŋgwé/KiBéndé (F10)

Us = KɪnaUshoola, Kɪnàʊshòòlà (F31a)
La = KɪnɪLaamba (Central), KɪnɪLààmbà (F31b)
Ha = KɪnɪHaanzu, Kɪnɪhàànzù (F31c)
Ah = GiAhi, GiÀhi (F32b)
Rw = GɪRwana, GɪRwàànà (F32a)
Mu = ɣɪnyaMunyiŋanyi, ɣɪnyàMùnyiŋànyi (GhɪnyàMùnyiŋànyi) (F32c)
Kn = KɪKɪɪmbʊ North (F24a)
Ks = KɪKɪɪmbʊ South (F24b)
Wu = ɪCɪWʊʊŋgʊ, ɪCɪWʊʊŋgʊ (F25)
Ra = KiiRaŋgi, KiiRàŋgi (KiiLàŋgi) (F33)
Mb = KeeMbuwe (KiMbugwe), KèèMbùwè (F34)
Sk = KɪSukuma, KɪSùkúmà
Nz = KɪNyamweezi, KɪNyàmwéézi
Km = KɪKɪɪmbʊ, KɪKɪímbʊ̀
Lm = KɪnɪLaamba language (not the dialect)
Rɪ = KɪRɪmi (or KɪNyatʊrʊ)

Nk = GɪnaNtuzu + JinaKɪɪya
Sk = Nk (GɪnaNtuzu + JinaKɪɪya) + KɪmunaSukuma (KɪSukuma)
Sd = Sk (Nk (GɪnaNtuzu + JinaKɪɪya) + KɪmunaSukuma) + KɪDakama
Nz = KɪNyanyeembe + KɪKonooŋgo + SiGalagaanza (KɪNyamweezi)
Sy = SiSiloombo + SiYoombe = (SiSuumbwa, SiSúúmbwà)
Ul = KɪnaUshoola + KɪnɪLaamba C (Central)
Km = Kɪkɪɪmbʊ North + KɪKɪɪmbʊ South (Kɪkɪɪmbʊ), KɪKɪímbʊ̀
SN = Sd + Nz
Ar = GiAhi + GɪRwana
NM = SN + Km
Lm = Ul + KɪnɪHaanzu
Rɪ = Ar + ɣɪnyaMunyiŋanyi, KɪRɪmi
NL = NM + Lm
NR = NL + Rɪ

The following groupings are adapted from the inspirations of Nurse (1979b), Nurse and Philippson (1980a), Nurse (1988), Nurse and Hinnebusch (1993), Schoenbrun (1997), Muzale (1998), Ehret (1999), Schadeberg (2000) and Maho, Nurse and Philippson (2000) with slight modifications where relevant. They are open for better modification because information is not yet complete, sometimes it is inaccurate, or it is both.

Western Highlands (DJ60) = KinyaRwanda (DJ61), KiRundi (DJ62), iKiFuliiru (DJ63), KiShuβi (DJ64), KiHangaza (DJ65), iGiHa (DJ66), KiVinza (DJ67)
North Rutara (EJ11-14) = Runyoro (EJ11), RuTooro (EJ12), oLuNyankole (EJ13),

oLuCiga (EJ14)

South Rutara = oRuNyambo (EJ21), oRuHaya (EJ22 (RuZiba (EJ22a), RuHamba (EJ22b), Runyalhangiro (EJ22c), RuHyoza (EJ22e)), RuZinza (EJ23), RuKereβe (EJ24)

Suguti (EJ25) = KiJita (EJ25a), KiKwaaya (EJ25b), KiRegi (EJ25c), CiRuri (EJ25d)

North Nyanza (EJ15-EJ17) = LuGanda (EJ15), oLuSoga (EJ16), oLuGwere (EJ17)

Luhya (EJ30 and EJ41) = LuMasaaβa (EJ31) = LuGisu/LuKisu (EJ31a/b), Luβukusu (EJ31c1), oLuSyan (EJ31d), oLuTachon (EJ31e), oLuDadiri (EJ31f), LuBuya (EJ31g), LuWaŋga (EJ32a), oLutsotso (EJ32b), LuMarama (EJ32c), LuKisa (EJ32d), LuKabarasi (EJ32e), LuNyala (EJ32f), LuNyore (EJ33), oLuSaamia (EJ34) = LuXaayo (EJ34a), LuMarachi (EJ34b), oLuSoŋga (EJ34c), LuNyuli (EJ35), LuLogooli/LuRagooli (EJ41), LwIdaxo (EJ41a), LwIsuxa (EJ41b), oLuTiriki (EJ41c)

East Nyanza (EJ42-EJ45) = KiNgurimi (EJ401), KiKuria (EJ43), iKiZanaki (EJ44) including varieties like iKiIsenyi (EJ44b), KiNdali (EJ44c), KiSiora (EJ44d), KiSweta (EJ44e), KiRoba (EJ44f), KiIkizu (EJ44g) GiRango (EJ44h), KiSimbiti (EJ44k), KiShaashi (EJ44l), KiHacha (EJ44m), KiNata/KiIkoma (EJ45), (eKiGusii (EJ42))

Thagicu/Central Kenya (E50) = Gɪkʊyʊ (E51), KiEmbu (E52), KiMeru (E53), KiTharaka (E54a), KiCuka (E54b), KiKamba (E55) and KiSonjo (E46)

Chaga/Kilimanjaro-Taita (E60, with or without E74) KiRwo/KiMeru (E61), KiSiha (E611), KiChaga (E62), KiMachame (E62a), KiWunjo (E62b), KiRombo (E62c), KiWoso (KiBosho) (E62d), KiSeri (E62e), KiKeni (E62f), KiArusha (E63), KiKahe (E64), KiGweno (E65), KiTaita (E74) = KiDaβida (E74a), KiSagala (E74b)

Seuta (some G20), (some G30) = KiShambala (G23), KiBondei (G24), KiZigula (G31), Kiŋgulu (G34)

West Ruvu (G10, G39) = CiGogo (G11), KiKagulu (G12), KiSagala (G39)

East Ruvu (G30) = Kiŋhwele (G32), KiDoe (G321), KiZalamo (G33), iKiLugulu (G35), KiKami (G36), KiKutu (G37), G38 CiVidunda

Sabaki (G40 and E71, E72, E73) = KiMwani (G401), KiMakwe (G402), CiFundi/KiShirazi (G403), KiTikulu (G41) = (Kitikulu (G41a), KiMbalazi (G41b)), KiSwahili (G42) = (KiAmu (G42a), KiMvita (G42b), KiMrima (G42c), KiUŋguja (G42d)), KiPemba (G43) = (KiP^{h}emba (G43a), KiTumbatu (G43b), KiHadimu/ KiMakunduchi (G43c)), KiKomoro (G44) = (Kiŋgazija (G44a), KiNjuani (G44b)), Kiɸokomo (E71), KiDhaiso/KiSegeju (E56), MijiKenda = (KiGiryama (E72a), KiKauma (E72b), KiConyi (E72c), KiDuruma (E72d), KiRabai (E72e), KiRibe (E72f), KiJibana (E72g), KiKambe (G72h)), KiDigo (E73))

KiLombero (G50) = KiPogolo (G51), KiNdamba (G52)

Southern Highlands (G60) = eSiSaŋgu (G61), eKiHehe (G62), eKiBena (G63), KiPaŋgwa (G64), KiKiŋga (G65), KiWanji (G66), KiKisi (G67)

Corridor (M10 = Corridor-Fipa, M20 = Corridor-Nyiha) = iCiPimbwe (M11), KiLuŋgwa (M12), CiFipa (M13), CiLuŋgu (M14), iCiMambwe (M15), iCiWanda (M21), CinaMwaŋga (M22), iʃiNyiha (23), iʃiMalila (M24), iʃiSafwa (M25), Iwa (M26), Tambo (M27), (ɪCɪWʊʊŋgʊ (F25))

Nyakyusa (M30) = ɪKɪNyakyusa (M31), CiNdali (M32)

Tanzanian Ciŋgoni (N10) = KiNdendeule (N101), KiNindi (N102), CiManda (N11), Ciŋgoni (N12), CiMateŋgo (N13), CiMpoto (N14)
Rufiji (P10) = KiNdengeleko (P11), KiRuihi (KiRufiji) (P12), KiMatumbi (P13), Kiŋgindo (P14)
Ruvuma (P20) = CiYao (P21), CiMwera (P22), CiMakonde (P23), CiMaciiŋga (M231), CiMaβiha (P25)
Northeast Coast Bantu (NEC) = Sabaki (G40 and E71, E72, E73); Seuta (G23, G24, G31, G34); Ruvu (West and east as shown above); and Pare (G21, G22) (Nurse and Hinnebusch 1993)

The following symbols can be used and/or interpreted interchangeably as follows, when they occur:

y	= IPA [j] (palatal semi-vowel)
j	= IPA [ɟ] (voiced palatal stop)
c, ch	= IPA [c] (voiceless palatal stop)
sh	= IPA [ʃ] (voiceless palatal fricative)
ny	= IPA [ɲ] (voiced palatal nasal)
ng	= IPA [ŋg] (prenasalized [g])
ng'	= IPA [ŋ] (voiced velar nasal)
mh	= IPA [m̥] (voiceless bilabial nasal /m/)
nh	= IPA [n̥] (voiceless alveolar nasal /n/)
nyh	= IPA [ɲ̊] (voiceless palatal nasal /ɲ/)
ŋh, ngh	= IPA [ŋ̊] (voiceless velar nasal /ŋ/)
gh	= IPA [ɣ] (voiced velar fricative)
tl	= IPA [ɬ]
th	= IPA [θ]

BS	= Bantu Spirantization
DL	= Dahl's Law
Glott	= Glottalization
PAL	= Palatalization

(ii) Definitions

Conservative language or variety: a language which has remained stable across time as to closely resemble its ancestor. KIKIImbU is sometimes called 'a walking Proto Bantu of modern times' because of maintaining many features of its ancestor.

Core or basic vocabulary: lexical items in a language for concepts which are not context-dependent, for example, head, leg, water, eat, cry, you, I, mother, two, expected to be found

in all languages of the world as universal givens.

Cultural vocabulary: words in the lexicon of a language expressing concepts which dependent on place of domicile, human activity, need for detail, innovation, invention, often influenced by geographical, technological or economic context, in a continuum between the universal and the cultural, for example, horse, ship, aadvark, snow, cow, lake/sea/ocean, shoe, shield, most non-primary colours (outside red, white, black), freeze, etc

Dialect: a linguistic variety in a continuum of several varieties belonging to a larger unit, the language. Close mutual inter-comprehensibility enables the speakers of each variety to use their individual varieties without the need for an interpreter.

Genetic language relationship: a connection of languages descended directly from an immediate proto language, depending on the level of analysis. For example, oRuHaya and iCiGogo, or KInILaamba (F31) and KISukuma (F21) are not genetically related because they do not branch from an immediate ancestor, although they are both Bantu, classified in Zone F.

Glottalization: change of CPlace feature of a sound to the glottal stop [ʔ] or [h]. In our context, it refers to change of PB *p to /h/. It suggests that the quality of the plosive was [p^h], and it involved loss of occlusion and retention of the aspiration, as in SiSuumbwa, which is a regular diachronic phonological process.

Glottochronology: the next step in the use of Lexicostatistics for absolute dating of languages. Lexicostatistics uses the same formula and therefore assumptions about the nature of language.

Language: a speech variety linguistically distinct from other varieties whereby inter-comprehension is severely limited, requiring an interpreter for meaningful communication to occur. Within the same language family or group like two Bantu languages, the boundaries between languages may be fuzzy, and therefore it is a relative term, while across other linguistic families and groups, like KiSwahili and Iraqw, it is an absolute term because the differences of the languages are sharply defined. In this study, 'language' is sometimes used in this distinctive sense, while in others it is synonymous with 'dialect'.

Lenition: weakening of sounds in the strength hierarchy continuum from voiceless stops to complete sound loss as an inverse of the sonority hierarchy: voiceless obstruents → voiced obstruents → nasals → liquids → glides → vowels → total loss, or stop → affricate → fricative → approximant → zero (or stop → affricate → fricative → approximant → zero)

Lexicostatistics: a statistical analysis of vocabulary for relative chronology and grouping.

Loan, Loanword or borrowed word: a lexical item which is not native to a language but is adopted and/or adapted from other languages or dialects to become part of its own lexicon, never to be returned to the source language, contrary to the sense of terms 'loan' and 'borrow' which suggest returning or refunding the word after use.

Names of languages: while the traditional writing conventions have been maintained faithfully wherever it was feasible, some customary representations of the names were simply not correct. For instance, the name "Takama" 'south' was not used because in KɪSukuma and KɪNyamweezi, the phonemes /d/, /t/ and /l/ exist independently from each other while in some cases they may derive from each other as a result of processes like Dahl's Law where plosives become voiced as in /t/ → /d/, l →d/N__. In "dakama', the phoneme is /d/ rather than a process of Dahl's Law from "takama". Phoneme /d/, as in *dakama*, exists in words like *madaaso* 'rags', *jidɪvi* 'jackal', *lʊdʊmɪ* 'testicular hydrocele'

Narrow Bantu: languages of Zones A to S according to Guthrie (1967-1967) and the justification of doing so, including the split of Zones D/E into D, E, J. Those languages which are unambiguously D or E, where applicable, are represented with one letter only, while those in-between use the two-letter convention of either DJ or EJ. These language varieties are like D28a (West Holoholo DRC), D28b (East Holoholo (Tanzania), D43 Nyaŋga, DJ41 oLuKoonzo, DJ42 oLuNande, DJ51KiHuunde, DJ52 KiHaavu, DJ531 KiTembo, D54 KiBembe, DJ56 KaBwari, DJ60 KiRundi-KinyaRwanda (DJ61 KinyaRwanda, DJ62 KiRundi, DJ63 iKiFuliiru, DJ64 KiShuβi, JD65 KiHangaza, DJ66 iGiHa, DJ67 KiVinza); Zone EJ ((EJ10 RuNyoro-LuGaanda Group: EJ11 RuNyoro, EJ12 RuTooro, EJ13 oLuNyankole (GiHima), EJ14 RuCiga, EJ20 (RuNyambo, oRuHaya, RuZinza and RuKereβe), EJ30 Luhya, EJ40 East Nyanza, E46 KiSonjo; E50 Thagicu, E60 Chaga, etc

Orthography and phonological representation: There are some standardized forms, mainly following the IPA system. But many pronunciations have been affected by writing conventions where it is difficult to trace a sound as originating from a regular sound change or from the writing system. For instance, the orthographies for ɪ, ʊ, ɣ, ɸ, β, and ŋ were simplified to accommodate the simple typescripts and printers in use in Europe then. These simplified and sometimes distorted sounds became i/e for ɪ; u/o for ʊ; gh for ɣ; f for ɸ; b/v/w for β and mw for ŋw. This can be illustrated by the case of KɪRɪmi whose dialects have a high frequency of /f/ instead of the expected /ɸ/. Other examples include the case of country names like "Malawi" which should be *Malaaβi*, or the famous Tanzanian towns located in βʊSukúma like Mwanza *(ʃwaanzâ)*, Mwadui (*ʃwaaduβi*).

Palatalization: effect of front or high vowels as a secondary articulatory addition to other sounds, mainly on stops, making their place of articulation more palatal. This is contrasted with Bantu Spirantization which deletes the CPlace features of stops by replacing them with the [+consonantal] features of the superclose vowels PB *i and *u, making the fricatives (See

Zoll 1995:542). In KISukuma and KINyamweezi, the conditioning vowels for palatalization are the superclose *i and *u (or *ị and *ụ, as represented by Guthrie (1967-71). The end results of palatalization and Bantu Spirantization may be identical.

Place names in SSN, like *βɑSukuma* simply mean 'the land of KISukuma speakers' or 'Sukumaland'. *βɑ-* is the prefix signifying 'land of'

Prefixes in the names of languages and their varieties: The short forms commonly used in Bantu languages can be compared to the two figures for the dates when the computers started. Like the 2yk bug scare-cum-hoax, the fewest characters possible were used for economy of memory. In this study, the names are written in full with their prefixes. The use of the prefix *Ki-*, and its varieties *Kee, KI, Ci-(Chi-), Shi-, Si-, or Ji-*, to designate a language in the Bantu group of languages has always been ignored as redundant by earlier researchers (mostly European) of Bantu languages and linguistics who assumed and some still assume that the prefixes serve no purpose when rendered into languages like English. Some of the researchers who followed maintained that tradition of prefix omission. Because of this, proper phonological and orthographic records of languages and their varieties was not adhered to because of the limitations experienced by earlier researchers who imposed their perceptions and preferences. For example, they normally approximated most of the words, proper- and place- names to the closest alphabet they knew, normally the Roman alphabet adopted in KiSwahili writings. Thus, most of the language names were written in the KiSwahili format, with uniform prefixes even when they were not used. For instance, a language like SiSuumbwa is sometimes referred to as KiSuumbwa. One undertaking in subsequent research should be to correct such generalizations and refer to the languages by means of their proper Bantu names. The language varieties investigated therefore follow as far as possible, the phonological or orthographic format closest to how the native speakers pronounce them, unless space is not available, especially in tables.

Proto Bantu: reconstructed, hypothetical language thought to be the ancestor of all modern Bantu languages and their dialects.

Tone marks in words are avoided in most cases unless it is necessary for making a point related to tone. Tone marks are indicated mainly when introducing the names of the language varieties under investigation. Subsequently, the tones are not marked on those languages.

Traditional: accepted from earlier analyses without significant modification. Eg, *traditional language labels and their boundaries*: these are also synonymous with 'tribes' and the boundaries which were drawn more or less following the limits of each 'tribe' (See *Map 1.3* from which *Map 1.1* and *1.2* are based). Real life speech communities have no borders and hence languages have fluid boundaries which continuously interact with other languages.

Variety: any speech form, either a language or dialect. In the study the term is used to refer to either language or dialect or both.

Voiceless nasals: there are four, as counterparts of the voiced nasals, /m, n, ɲ, ŋ/ namely /m̥, n̥, ɲ̊, ŋ̊/, also represented orthographically as mh, nh, nyh or ɲh, ngh or ŋh, where ny and ng represent ɲ and ŋ respectively. They are mainly found in KISukuma (F21) and KIDakama (F22b).

Vowels from other sources use the 7-vowel system of the cardinal vowels of the International Phonetic Alphabet (IPA), which Guthrie (1967-1971) used: /i̯, i̯i̯, i, ii, e, ee, a, aa, o, oo, u, uu, ụ, ụụ/ . We are using the convention /i, ii, ɪ, ɪɪ, e, ee, a, aa, o, oo, ʊ, ʊʊ, u, uu/, like Nurse (1979a) for West Tanzania, Maganga and Schadeberg (1992) for KiNyamwezi who represent the sounds as (i, ii, ɩ, ɩɩ, e, ee, a, aa, o, oo, ʊ, ʊʊ, u, uu/, and Schadeberg (1995), with i, ii, ɪ, ɪɪ, e, ee, a, aa, o, oo, ʊ, ʊʊ, u, uu/, with the requisite tones placed where relevant, possible or necessary. The recommended transcription by the International Institute of African Languages and Cultures for the seven vowels was /i, e, ɛ, a, ɔ, o, u/

Vowels (double): represent vowel length, equivalent to /ː/ or /¯/ as in /aː/ or /ā/ whether as contrastive or phonetically determined

Vowel reduction from 7 to 5 (7 > 5): Process of loss or merger in Bantu languages where the Proto Bantu vowel system of seven vowels, for instance, /i, e, ɛ, a, ɔ, o, u/ is reduced to five, /i, ɛ, a, ɔ, u/ or /i, e, a, o, u/. The process is associated with Bantu Spirantization, as explained in Chapter 3.

Dedication

For Masele Liindege ŋhalaaŋgɪli Poondejo, my father; Daudi Nyolooβi; Saayi ŋwanaJimenye Masele; ɦʊʊmbô; Taámbaalô Mshaṃɪɪndɪ ŋwanăGabáádi TaambɪlɪJa Kulwa; Dooto ŋwanaMasele; Naaṃala ŋwanăŋhuungúlúmé; Gɪgwâ ŋwanIpóóndéjo; George Mattao; Saffari Sanka; Averil Ralph Pye; Milembe Masele; Hajjat Hawa Mwanaidi Mufuruki. You departed quickly before us, and we followed. A microcosm of humanity and eternity.

The tribes. For their tenacity to survive in the jungles. Hopefully they will maintain their languages a little longer while the notes are still being taken with this faded ink, slowly.

Copyright © Balla F.Y.P. Masele 2001

CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION

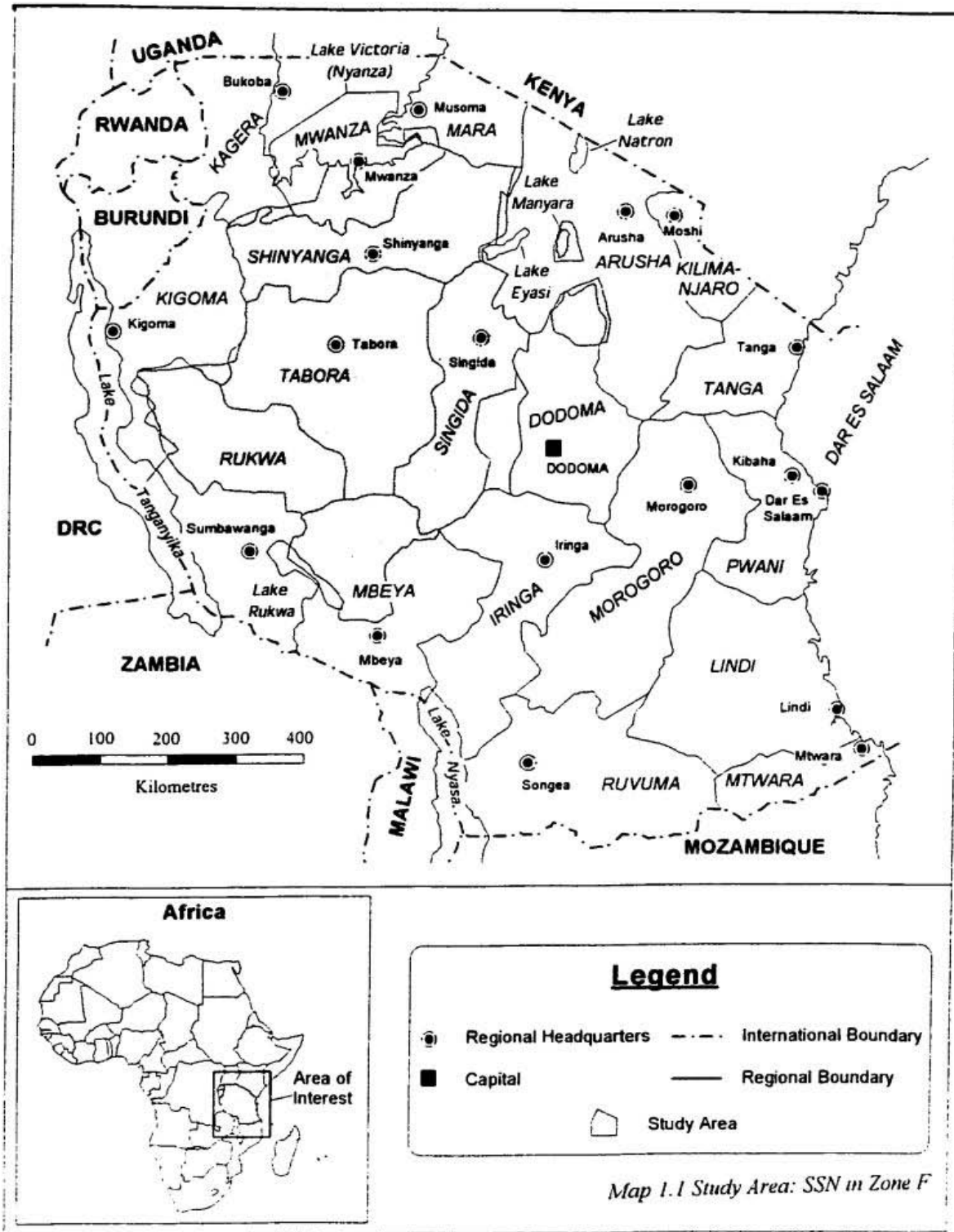
This research describes the linguistic history of SiSúúmbwà[1], KÌSùkúmà[2] and KÌNyàmwéézi (henceforth SSN). The three languages are part of what Guthrie (1967-1971) calls Bantu Zone F[3] (also known as West Tanzania) (See *Map 1 and 2*). The varieties investigated are ten. These include the following three from SiSúúmbwà (F23): SiSilòòmbò (F23a), SiYòòmbé (F23b), and KiLòòŋgò (F23c); three from KÌSùkúmà (F21): KÌmùnàSùkúmà (F21a), GÌmùnàNtùzù (also GÌnàNtùzù) (F21b), JinàKÌÌyà (also JimùnàKÌÌyà) (F21c); and four from KÌNyàmwéézi(F22): KÌNyànyéémbé (F22a), KÌDàkámà (F22b), SiGàlàgàànzà (F22d) and KɪKònòòŋgò (F22e). Hitherto, SSN has been considered a valid genetic grouping by Guthrie (1967-1971), Nurse (1979a, 1999), Kahigi (1988), Ehret (1999) and

---

[1] The forms of the language names with long vowels have been adopted in order to record the names phonetically, rather than phonemically. The aim is to avoid ambiguities. For instance, KɪNyamweezi and JinaKɪɪya have long /e/ and /ɪ/ both phonologically and phonetically, although they are erroneously written with a short /e/ and /ɪ/ respectively.

[2] Another name is KɪGwe, presumably, the original core of the KɪSukuma language around which speakers from other speech communities amalgamated and later became known as KɪSukuma speakers. KɪSukuma is a recent name originally used by outsiders. It is paradoxical though, that the original name, KɪGwe, is not used now, except as a cross-reference in archives, and many speakers do not even know of its existence. Its reference is also restricted to one location near Lake Victoria rather than the whole KɪSukuma speaking area (See Guthrie 1967-71).

[3] Guthrie's work on classification is a classic in Bantu linguistics. His system of classification is also the most popular, and hence he forms a point of departure for this study.



Map 1.1 Study Area: SSN in Zone F

others. But there are reasons now to doubt this. Thus, the relationship of F23 to SSN will be investigated in detail. The labels "SSN" and "Zone F" are therefore only referential at this point.

Furthermore, Zone F contains not only SSN, but also has other languages and their varieties, the total list under our investigation of which is 22, as shown in *Table 1.1*. For comparative purposes all those varieties' data are included in order to put SSN in proper perspective. Where appropriate, these other varieties outside SSN are discussed at some length.

In this study, a comparison is made between the SSN within Zone F to trace its phonological and lexical evolution observed across time, from as far back in history as we can go for each variety, to the present. As the variety's written forms are quite recent, or virtually non-existent, and since most of the varieties are still essentially oral, going back in time is only possible by examining the varieties by means of available synchronic data. In unwritten languages, it is usually necessary to obtain maximally accurate synchronic data for all known varieties and variations within varieties so as to make the projections into the past as valid as possible.

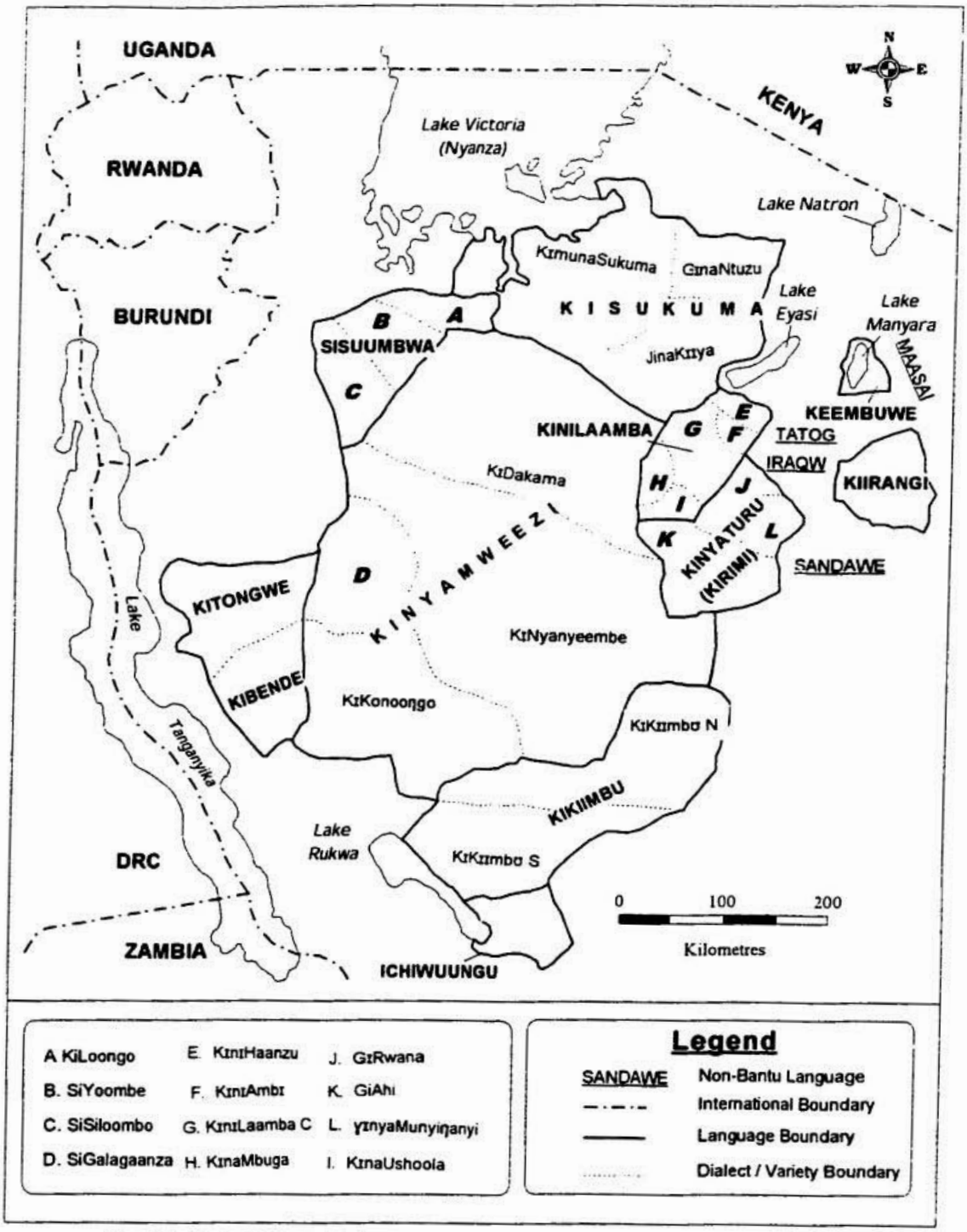
Table 1.1. Language varieties of Zone F (SSN is shaded)

"Language"[4]	"Dialect"		"Language"	"Dialect"
F10 KiTòòŋgwè/ KiBèèndè	F10 KiBèèndè[5]		F24 KìKíímbò	F24a KìKíímbò North
F21 KìSùkúmà	F21a KìmùnáSùkúmà			F24b KìKíímbò South
	F21b GìnàNtùzù		F25 ìCìWòòŋgò	
	F21c JìnàKìÌyà		F31 KìnìLàámbà[6]	F31a Kìnàòshòòlà
F22 KìNyàmwéézi	F22a KìNyányèèmbè			F31b KìnìLàámbà (Central
	KìDàkámà			F31c KìnìHàànzù
	F22d SìGàlàgàànzà		F32 KìRìmi	F32a GìRwànà
	F22e KìKònòòŋgò			F32b GìÀhi
F23 SìSúúmbwà	F23a SìSìlòómbò			F32c ɣìnyàMùnyiŋànyi
	F23b SìYòombè		F33 KiiRàŋgi	
	F23c KìLòòŋgò		F34 KèèMbùwè	

[4] "Language" and "dialect" are used in their imprecise form to mean both linguistic and socio-political entities, "dialects" being subordinate to the superordinate, "language". As shown in *Map 1.2* below, the language varieties written in italics are dialects. Where space was not sufficient, a key using arbitrary letters from A to I was used to represent them.

[5] The group label of F10 was taken rather than F11 KiTòòŋgwè and F12 KiBèèndè. Only one language was used with the assumption that the two are in fact one language, as explained below.

[6] KìnàNdáágò , KìnàMbǔgà, Kìn'Ìámbì are not discussed



Map 1.2. Study Area, SSN and Zone F.

The geographical locations of the varieties under investigation are contiguous, found mainly in Mwanza, Shinyanga, Tabora and Rukwa Regions (See *Map 1, 2* and *3*). The primary data were first collected in Tanzania in the 1970s. The informants wrote their responses in the questionnaires given to them. In order to improve their quality, the data were revised by audio recordings in 1999 with the aim of including as accurately as possible not only the segmental tier comprising of consonants and vowels, but also the tonal tier showing all the surface tones heard for each variety. The tonal tier was especially included in this revision of the data as a resource for future use by other researchers who might be interested in tonology. In this study, however, the tonal aspect is only mentioned in passing where relevant because it is a vast research area in its own right.

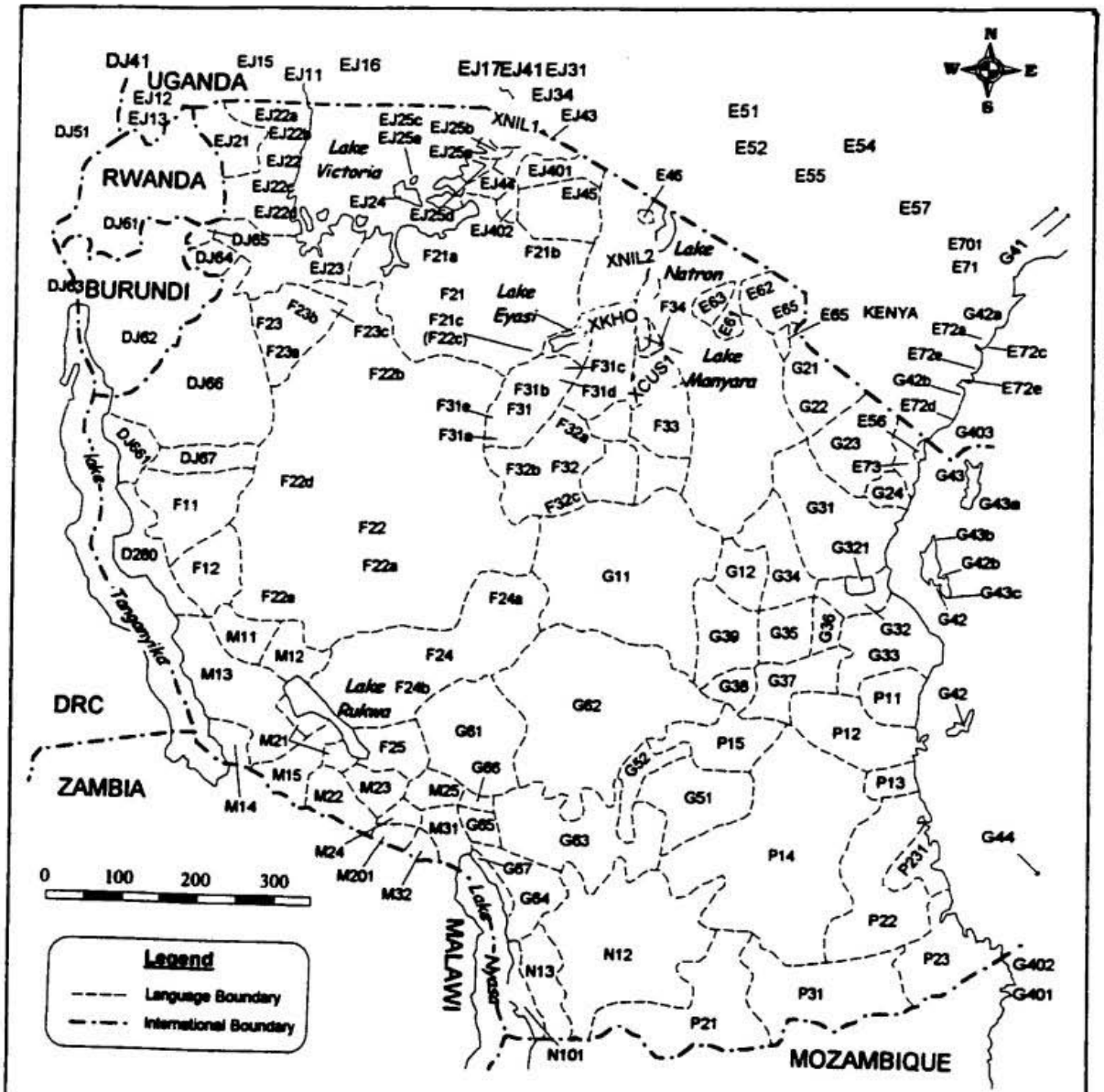
1.1 THE PROBLEM

1.1.1 Background of the problem

Dead languages as linguistic artefacts are often viewed as cultural resources only with insignificant practical utility. However, the importance of all languages without exception remains multidimensional when they are extant. For instance, the internal dynamics of language change like the effect of Tanzania's language policy on ethnic community languages is well known (Rugemalira 1994:2-6, Rubagumya 1997, Mekacha 1997, Mkude 1999) and ceases to be an academic question only. Many of the more than 120 ethnic community languages and dialects in Tanzania are going to disappear without trace if a concerted effort is not undertaken now to record what data are currently available, not only in languages *per*

se, but also in other fields where indigenous-based knowledge is accessible through language only. Nishida and Uehara (1981:109) observe this with regard to KiTòòŋgwè plant names, that such a culture was vanishing rapidly and a record of indigenous-based knowledge like ethnobotany was urgently required. Some dialects are going to have very few speakers, while a few may have none left not far in the foreseeable future. The language varieties under such real threat include some in SSN. For example, KiLooŋgo's status is not known, because only occasional mention is made in non-linguistic literature, without any clear idea of how many speakers are there now, and where they live. Others in this category include F31c and F34, with only a few hundreds speakers remaining, while the environment for ethnic languages thriving is so hostile.

In addition, the impact of globalization as a powerful external influence south of Lake Victoria in the long run is likely to further shrink the languages of ethnic communities, both geographically and functionally, while making others extinct. This phenomenon is not confined to SSN alone. As a political, economic as well as a cultural resource for disseminating knowledge and information, these ethnic community languages and their varieties play a central role in the preservation and transmission of culture at grassroots level. Before this language attrition and/or extinction happens while we are still at the threshold of major changes in the area, it is imperative to start studying and recording these languages before it is too late.



Map 1.3 Some language varieties of ethnic communities in Tanzania and E. Africa

Key to Map 1.3. Codes and their languages (after Guthrie's scheme)

Code	Language	Code	Language	Code	Language
D25	KɪLega	EJ31g	LuBuya	E54b	KiCuka (E57?)
D28	KiHoloholo	EJ32a	LuWaŋga	E61	KiRwo/KiMeru
D28b	KiHoloholo - East	EJ32b	oLutsotso	E611	KiSiha
D41	oLuKoonzo	EJ32c	LuMarama	E62	KiChaga
DJ51	KiHuunde	EJ32d	LuKisa	E62a	KiMachame
DJ61	KinyaRwanda	EJ32e	LuKabarasi	E62b	KiWunjo
DJ62	KiRundi	EJ32f	LuNyala	E62c	KiRombo
DJ63	iKiFuliiru	EJ33	LuNyore	E62d	KiWoso (KiβosHo)
DJ64	KiShuβi	EJ34	oLuSaamia	E62e	KiSeri
DJ65	KiHangaza	EJ34a	LuXaayo	E62f	KiKeni
DJ66	iGiHa	EJ34b	LuMarachi	E63	KiArusha
DJ661	KiUjiji	EJ34c	oLuSoŋga	E64	KiKahe
DJ67	KiVinza	EJ35	LuNyuli	E65	KiGweno
EJ11	RuNyoro	EJ41	LuLogooli	E701	kiIwana/Malako
EJ12	RuTooro	EJ41a	Lwidaxo	E71	Kiɸokomo
EJ13	oLuNyaŋkole	EJ41b	Lwisuxa	E72	KiNyika
EJ14	oLuCiga	EJ41c	oLuTiriki	E72a	KiGiryama
EJ15	LuGanda	EJ401	Giŋgoreme	E72b	KiKauma
EJ16	oLuSoga	EJ403	KiSuba	E72c	KiConyi
EJ17	oLuGwere	EJ404	SiZaki	E72d	KiDuruma
EJ21	oRuNyambo	EJ42	eKiGusii	E72e	KiRabai
EJ22	oRuHaya	EJ43	GiKuria	E72f	KiRibe
EJ22a	RuZiba	EJ44	IkeZanaki	E72g	KiJibana
EJ22b	RuHamba	EJ44b	Ikilsenyi	E72h	KiKambe
EJ22c	Runyalhangiro	EJ44c	KiNdali	E73	KiDigo
EJ22e	RuHyoza	EJ44d	KiSiora	E74	KiTaita
EJ23	RuZinza	EJ44e	KiSweta	E74a	KiDaβida
EJ24	RuKereβe	EJ44f	KiRoba	E74b	KiSagala
EJ25a	CiJita	EJ44g	Kelkizu	F11	KiTongwe
EJ25b	KiKwaaya	EJ44h	GiRango	F12	KiBende
EJ25c	KiReki (KiRegi)	EJ44k	KiSimbiti	F21	KɪSukuma
EJ25d	CiRuri	EJ44l	KiShaashi	F21a	KɪmunaSukuma
EJ25e	KiKara	EJ44m	KiHacha	F21b	GɪnaNtuzu
EJ30	Luhya Masaaβa	EJ45	KeNata/Ikoma	F21c	JinaKɪɪya (F22c)
EJ31ab	LuGisu/LuKisu	E46	KiSonjo	F22	KɪNyamweezi
EJ31c	Luβukusu	E51	Gɪkʊyʊ	F22a	KɪNyanyeembe
EJ31d	oLuSyan	E52	KɪEmbu	F22b	KɪDakama
EJ31e	oLuTachon	E53	KiMeru	F22d	SiGalagaanza
EJ31f	oLuDadiri	E54a	KiTharaka	F22e	KiKonoongo

Code	Language	Code	Language	Code	Language
F23	SiSuumbwa	G40	KiSwahili	M15	iCiMambwe
F23a	SiSiloombo	G41	KiTikulu	M201	iCiLambya
F23b	SiYoombe	G41a	KiTikulu (Socotra)	M21	iCiWanda
F23c	KiLoongo (EJ10/20)	G41b	KiMbalazi	M22	CinaMwanga
F24	KɪKɪɪmbu	G42a	KiAmu	M23	iʃiNyiha
F24a	KɪKɪɪmbʊ N	G42b	KiMvita	M24	iʃiMalila
F24b	KɪKɪɪmbʊ S	G42c	KiMrima	M25	iʃiSafwa
F25	ɪCɪWʊʊŋgʊ	G42d	KiUnguja	M31	ɪKɪNyakyusa
F31	KɪnɪLaamba	G42e	KiMalindi	M32	CiNdali
F31a	KɪnaUshoola	G42f	CiFundi	M41	CiTaabwa
F31b	KɪnɪLaamba C	G42g	Cwaka	N101	KiNdendeule
F31c	KɪnɪHaanzu	G42h	CiVumba	N102	KiNindi
F31d	Kɪnlambi	G42i	Nosse Be	N11	CiManda
F31e	KɪnaMbʊga	G43	KiPemba	N12	CiNgoni
F32	KɪRɪmi	G43a	KiPhemba	N13	CiMatengo
F32a	GɪRwana	G43b	KiTumbatu	N14	CiMpoto
F32b	GiAhi	G43c	KiMakunduchi	N15	CiTonga (CiSiska)
F32c	ɣɪnyamunyiŋanyi	G43d	KiMafia	P11	KiNdengereko
F33	KiiRangi	G44	KiKomoro	P12	KiRuihi/Rufiji
F34	KeeMbuwe	G44a	ʃiNgazija	P13	KiMatumbi
G11	CiGogo	G44b	KiNjuani	P14	KiŋgindoKiMwani
G12	CiKagulu	G44c	KiMwani	P15	KiMbuŋga
G21	KiTuβeta/Taveta	G44d	KiMaore	P21	CiYao
G22	CiAsu/Casu/KiPare	G51	KiPogolo	P22	CiMwera
G23	KiShambala	G52	KiNdamba	P23	CiMakonde
G24	KiBondei	G61	eSiSangu	P231	CiMaciiŋga
G31	KiZigula	G62	eKiHehe	P24	CiNdonde
G32	KiNghwele	G63	eKiBena	P25	CiMaβiha
G321	KiDoe	G64	KiPangwa	P31	iMakua
G33	KiZalamo	G65	KiKinga	X	Non-Bantu
G34	KiNgulu	G66	KiWanji	XCUS1	Iraqw
G35	iKiLugulu	G67	KiKisi	XCUS2	Mbugu
G36	KiKami	M11	iCiPimbwe	XKHO	Hadza
G37	KiKutu	M12	KiRungwa	XNIL1	Dholuo
G38	CiVidunda	M13	CiFipa	XNIL2	Il-Maasai
G39	KiSagala	M14	CiLungu	XNIL3	Datog*

XCUS = Cushitic, non-Bantu
XNIL = Nilo-Saharan, non-Bantu

*Not all dialects, languages, or language groups have been included, because of either lack of space or fragmentary information, although most languages are represented.

1.1.2. Statement of the problem

Most Bantu linguistic varieties are still undescribed and information about them is lacking (Polomé 1980:5; Kahigi 1988:6, 7; Brenzinger, Heine, & Sommer 1991:24, Nurse 1995b:467; 1999:10, 11). Uncovering their historical roots in a more systematic way using a technique like the Comparative Method, described below, will contribute towards a better understanding of the larger groups which they form.

1.1.3. Research Objectives

The study has one aim: tracing the linguistic history of SSN using phonological and lexical data, and relating that history to that of neighbouring languages. This involves using the two assumptions of comparative reconstruction: *the relatedness* and *the regularity hypotheses*. The *relatedness hypothesis* assumes that close similarity between two or more varieties can be best explained by assuming their historical relatedness and derivation from a single protoform. It also assumes that their linguistic histories can be explained by examining the phonological, lexical or morphosyntactic differences between them. The *regularity hypothesis* states that it is possible to reconstruct a protolanguage on the assumption that sound changes in languages are regular and predictable, and any irregularity caused by internal or external factors like contact with other languages or varieties can be accounted for.

While it is possible to arrange the varieties in relative chronology as their vocabularies depart in form and meaning from the protolanguage, it is difficult, if not impossible to determine a

precise unit of absolute chronology, e.g. of years, decades, centuries, or millennia to such classified members of a category if no other supporting external evidence like specimens of material culture is available to corroborate those dates (Worsley and Rumberger 1949:46; Nurse 1997:366).

Thus, the objective of this research can be summarized as the description of the evolution of the phonological and lexical aspects of SSN. From the results, a possible classification of the varieties is made based on the historical interpretation of the observed patterns and their implications for Zone F in general, and for SSN in particular.

1.1.4. Significance of the problem

As a single unit, Zone F or West Tanzania in general, and SSN in particular has not been investigated systematically enough apart from a few studies, mainly by Nurse (1979a, 1999), Ehret (1984, 1994, 1999) and the seminal but general work by Guthrie (1967-71) on the whole of Bantu. This study is therefore significant in three ways. First, it is the first of its kind to compare features of these 22 varieties at once. The study provides linguistic data for use by others in genetic classification and/or any other purposes. For instance, F21 is traditionally formed by the F21a, F21b, and F21c varieties while F22a, F22b, F22d and F22e belong to F22. On the other hand, F21 and F22 are highly intercomprehensible, implying that they might have undergone more or less the same innovations from a common ancestor not far back in the past. The data highlight the questions of whether it is valid to view F21 and F22

as discrete groups instead of one, and whether it is therefore necessary to adjust the internal sub-groups according to the patterns revealed by the data.

Secondly, the research is needed as a contribution to closing the gaps between the lower and higher levels of linguistic analysis in Bantu, namely, from today's varieties (dialects and languages) to Proto-Bantu. In the hierarchy of the Bantu linguistic tree, Proto-Bantu is at the highest level and is much discussed, whereas most intermediate proto-nodes have not been reconstructed and these levels are numerous[7]. The lower varieties are the only existing forms of a language, as a bridge to higher branches in the linguistic trees. Indeed, intermediate levels of well-studied languages, like those of the Indo-European phylum, still have gaps (Nurse 1995a:71). The challenge to do even more work in Bantu is greater.

Lastly, the study of the Bantu languages at the beginning of the 20th century was utilitarian rather than merely academic, as summed up by one of the earliest and greatest scholars of Bantu, Meinhof (1932: Preface), that Bantu was playing "such a great part in colonisation, trade and missionary work in the continent of Africa." Instead of being externally oriented along the lines mentioned by Meinhof, this study aims at contributing a further understanding for the benefit not only of outside scholars and other interested parties, but particularly, as a tool for the speakers of those languages themselves to understand their past, examine their

[7] Although there is still no consensus on the organization of the hierarchies from Proto-Bantu to today's varieties, one common version is: Proto-Bantu→eastern Bantu→Proto-Zone F→Proto-KiSukuma →JinaKIIya

present and think about their future in a different light.

1.1.5. Limitations of the study.

Five limitations characterize the current study. Firstly, only ten varieties from SSN are investigated; namely, SiSilòòmbò (F23a), SiYòòmbé (F23b), KiLòòŋgò (F23c), KǐmùnàSùkùmà (F21a), GǐmùnàNtùzù (also GǐnàNtùzù) (F21b), JinàKǐǐyà (F21c), KǐDàkámà (F22b), KiNyànyèèmbé (F22a), KíKònòòŋgò (F22e), and SiGàlàgàànzà (F22d). The rest of Zone F languages and varieties are not discussed in great detail except where relevant.

Secondly, only eight proto sounds are used to illustrate the history of SSN rather than the entire phonological system of Zone F. These sounds are PB *p, *b, *t, *d, *c, *j, *k, *g. The Proto-Bantu phonological inventory is composed of the reconstructed consonant phonemes shown in *Table 1.2*, after Guthrie (1967-71)[x]. The vowel phonemes are *į, *i, *e, *a, *o, *u, *ụ, long and short. The eight target sounds show more clearly five phonological developments addressed in the thesis: Bantu Spirantization, 7 > 5, Dahl's Law, glottalization and voiceless nasal formation. Sound changes are best shown by plosive sounds rather than by others like vowels, or nasals since the latter have changed very little, if at all. This aspect

[x] Adjustments have been made in the representation of some phonemes, especially vowels. Instead of Guthrie's *į, *u, *e, *a, *o, *u, *ụ we adopted the following convention for them, which is also used by Maganga and Schadeberg (1992) and Batibo (2000) and in their other publications: *i, *ɪ, *e, *a, *o, *ʊ, *u

and the next are addressed in detail in Chapter 3.

Table 1.2 Proto Bantu consonant phonological inventory

	Bilabial	Alveolar	Palatal	Velar
Plosive	*p, *b	*t, *d	*c, *j [ɟ]	*k, *g
Nasal	*m	*n	*ny [ɲ]	*ŋ
Prenasalized	*mp, *mb	*nt, *nd	*ɲj, *ɲc	*ŋk, *ŋg
Semivowel			*y	

Thirdly, another closely related limitation concerns the area of phonology where only three major aspects are covered: vowel systems, especially 7 vowel to 5 vowel reduction (7 > 5); Bantu Spirantization (BS), especially as related to 7 > 5; and Dahl's Law (DL). Other processes such as glottalization and voiceless nasal formation are added as secondary aspects.

Fourthly, the discussions are based on an original list of 1036 lexical items rather than on an unlimited number of linguistic data from the grammar, or entire vocabulary of Proto Bantu or Zone F (See *Appendix 1*). The list used contains both common core and cultural vocabulary. While every care was taken to transcribe the data as accurately as possible, some items were not usable for several reasons, including inaccurate transcription due to mishearing; repetition of concepts or words in the original list which resulted in deletions that in turn reduced the final total of the words used; misinterpretation of some questions asked

in the questionnaire by both the researcher and informant resulting in giving unexpected, and therefore irrelevant responses. These shortcomings were however few.

And finally, only the segmental level is fully treated, while the tonological systems of the varieties are not part of this study, since such an inclusion would make the work overly ambitious.

1.2. RESEARCH QUESTIONS

The following questions guided this research. They take into account some of the questions raised by Nurse (1999:32) as a direction for future research in the area. While some are empirical research questions, others are social in nature:

(1). What are the concrete criteria for the classification of Bantu languages into zones? Are they historical, areal or typological?

(2). How many of the criteria mentioned in number (1) above should a language or variety possess in order to qualify for membership into a zone?

(3). What rigorous features define Zone F, excluding all other zones?

(4). Within Zone F, what features distinguish one group of languages from others in exclusion of all others, justifying the isolation of those groups?

1.3. METHODOLOGY

Two methods are employed. Firstly, primary lexical data from field research was used as collected by Nurse and Philippson in the 1970s and which I revised in 1999, as explained below. The procedure is divided into three components. The first component is a general overview of the sound systems and vocabularies of Zone F languages as described in the above. The features that distinguish Zone F from the rest of Eastern Bantu, modelled after Nurse (1979b) are identified. The second component identifies the phonological and lexical differences and similarities between Zone F and SSN as a subgrouping within Zone F, while the last analyses the phonological as well as the lexical differences and similarities inside the SSN varieties. The last part forms the major focus of the study. The phonological and lexical parts form chapters of their own, chapter three and four respectively.

Secondly, secondary data is obtained by documentary review of other linguistic sources. Oral and recorded folklore and folk histories are also examined when available, and their merit appraised as legitimate sources of history and knowledge. In addition, archaeological and historical sources are also consulted as they relate to (historical) linguistics.

1.3. 1 Data collection

From an original list of 1036 words, I omitted 40 or so words in discussions for various reasons. These are shown with an asterisk in Appendix 1. This list of words was originally used by Guthrie (1967-71) and modified by Polomé (1980). It was further modified again by

Nurse and Philippson in the 1970s when they compiled a general list of 1036 words for the Bantu languages of East Africa (Nurse: personal communication). Where there were no apparent cognates or there was an obvious error in the datum, the lexical item was not used in comparisons. This reduced considerably the total number of usable words. The shortcomings in the data were similar to those experienced by Guthrie (1948 (1967): 5, 8). While in Guthrie's case the lexical items were collected, recorded and copied/recopied by others, using orthographies familiar to the research assistants rather than accurate phonological or phonetic versions of what exists in the varieties in question, I recorded all the data myself using mainly one informant for each variety. Whenever an informant got stuck, it affected the quality of the data significantly, especially because some informants found the questionnaire rather long, with many unfamiliar words and concepts. On the other hand, while I speak one of the SSN varieties, JinaKIIya, I was not conversant at all with some of the dialects. The informants' responses were relied upon in this case, some of which would qualify to be called second-hand. The use of data which is second- or third-hand, and therefore of indeterminate reliability, leads to conclusions which are essentially tentative.

1.3.1.1 Fieldwork

Fieldwork involved having one tape recorder with two microphones for the researcher and the informant. The taping took four months, from March 1999 to July 1999. The questionnaire was 28 pages long, taking an average of three hours and 14 minutes, with a range of 2 to 6 hours per informant.

1.3.1.2 The informants

The informants were aged between 25 and 55 years, largely trilingual in their ethnic community language, KiSwahili and English so that there was no need for interpreters. A few were bilingual in KiSwahili and their ethnic community language. Occupational groups included University of Dar Es Salaam students and professors, employees in the government and private sector and peasants. Each informant answered the questionnaire alone except for F24b, F21c, F24a, and F32a dialects where two of them helped each other. Where there were two informants working together, any disagreements were useful and significant, for they helped clarify fuzzy areas and hence improved the data. In addition, out of the total 26 informants, only three females volunteered for the interview. One significant observation of this gender difference occurred with a few items which reflected a division of labour and therefore experience. Terms for hunting, wild animals and foods, for instance, drew confident answers more readily with people who interacted more with the named environment. Such items were few and their significance minimal, since knowledge of items in one area was compensated by ignorance over another item.

1.3.2 Research instruments

The list of 1036 words was printed, starting with English glosses arranged in alphabetical order, followed by the KiSwahili ones as illustrated in *Table 1.3*. Guthrie's original list was rearranged where an item for a word was available, to match the English glosses. The serial numbers found in Guthrie (1967-71:118-145, Part 1, Volume 2) were retained for easy

reference, just as Nurse and Philippson's list retained its serial numbers for the same reason, as shown in *Table 1.3.*

Table 1.3. Sample data used to elicit responses

Serial No	English	KiSwahili	Zone F Variety
133[9]	abdomen, stomach, belly	tumbo	
495	abscess, boil	jipu (pl. majipu)	
786	abundant	tele	
786a	abundant/abound	tele	
571	abuse, insult	(ku)tukana	
252	abuse	(ku)amba	
809	accustomed (get)	(ku)zoea	
274	act (vt)	(ku)tenda	
229	add up	(ku)jumlisha	
927	adjacent (be); border (vi)	(ku)pakana	
662	adze, carpenter's	tezo	

A copy of the questionnaire was given to each informant. During the interview, the researcher had his own copy, and he read out the list to the informant who responded orally through a microphone s/he held in her/his hands. The researcher held another for his own, and they recorded their turns as they spoke, without having to share one microphone. The lists were read in either language, although the majority of the informants preferred them read in KiSwahili. Many of the informants had demanded that they take the questionnaires home to familiarize themselves with the content for some time before the actual interview. During the time of familiarization, some even volunteered to write their responses in the blanks, and

[9] These serial numbers refer to Nurse and Philippson's list

that subsequently speeded up the interviews, because they just read out the responses, stopping only when an ambiguous word, an unknown item, an inappropriate or unacceptable response was heard.

In the final version of the word-list after the interviews were completed, the KiSwahili column was removed and the English glosses simplified reference to items.

1.3.3 Data analysis

When the tapes were ready, 69 in all, the work of transcription started. A Sanyo TRC9010 transcriber was used. First, the data was transferred from the audio tapes by listening and writing them onto paper using IPA symbols for each of the 22 language varieties for every 28-page questionnaire. That made a total of 616 pages of A4 paper, comprising a total of approximately 22,792 words. The transcribed data were then entered into a word processor with the surface tone markings for every word.

Comparisons of the reflexes of the 8 target sounds, namely PB *p, *b, *t, *d, *c, *j, *k, *g, were then made. The reflexes of each sound in each language variety was observed and recorded. The totals of these reflexes for each sound were then added to see their frequency and distribution in each of the 22 varieties. Exceptions to the regular patterns were noted as irregular requiring an explanation. The regular reflexes formed the basis for finer internal organization of the dialects in SSN and in Zone F. Patterns were noted and conclusions

drawn.

These phonological patterns were examined to evaluate three major and two minor phonological processes. First, the 7V and 5V distinction in SSN and Zone F was done by identifying all relevant words with the target vowels. These vowels are mainly /ɪ/ and /ʊ/, which usually merge with /i/ and /u/ respectively in all 5V languages. The cases were counted and then tabulated. Secondly, Bantu Spirantization (BS) involving the superclose PB *i and *u vowels isolated BS and non-BS languages in SSN and Zone F. BS languages had spirants in that superclose vowel context, while non-BS ones did not show any change of reflex from the non-superclose vowels. Thirdly, Dahl's Law involving two adjacent syllables with voiceless obstruent onsets was examined. If the first obstruent was voiced, DL was confirmed, and the DL and non-DL languages identified.

Glottalization as a secondary focus area treated PB *p and its /h/ reflex. The distribution of glottalization cases was noted and the language varieties involved identified. And finally, voiceless nasal formation involved prenasalized voiceless consonants. In languages displaying this pattern, the prenasalized consonants changed into homorganic voiceless nasals when the CPlace feature was deleted from the consonants while retaining the laryngeal feature [-voice]. The results in each of the five areas appear in Chapter 3.

The second part involving lexical data to derive quantitative and qualitative evidence for the

validity of SSN and Zone F appears in Chapter 4. Quantitatively, lexicostatistics was used. A list of 100 words was taken from Nurse (1979a) the majority of which were in the 1036 word list. Twenty eight language varieties in all were used, the target 22 and 6 more outside Zone F as control cases. Cognates were identified for each pair of languages, the number shared between them noted and their percentages tabulated. Finally, a tree was constructed from those percentages. These percentages formed the nodes where linguistic branches diverged or converged. Conclusions were drawn based on which varieties qualified for entry into the tree. Some of these varieties were excluded from the tree because a cut off percentage had to be made.

Qualitatively, the vocabulary from the 1036 word list was examined for cases of shared lexical innovation by unique invention, borrowing or areal influence. Innovation is a measure of genetic relationship.

The overall patterns from all areas of the analysis were finally evaluated for making conclusions about SSN and Zone F generally.

1.3.4 Problems in data collection

While the data collection exercise was expected to be smooth and straightforward, as it was a revision of an existing, ready-made list, the following major observations might prove useful in avoiding similar pitfalls in future data collection:

1.3.4.1 Ambiguous words used in the English and KiSwahili glosses.

Sometimes it was difficult to ask or elicit the expected words:

(a) because the informants had several words at their fingertips and they were not sure which one(s) the researcher wanted. For instance, an entry like 'to harvest' and *kuvuna* in KiSwahili was extremely ambiguous when a farming community member was asked. The natural question was usually 'To harvest what?'. With such single-meaning words in either English or KiSwahili and their several senses in the other varieties, a general term of 'harvesting' in many of Zone F languages was not available. A choice of a lexical item by an informant in such ambiguous concepts would tend to automatically skew the results because a uniform lexeme would depend only on chance where as many as ten possibilities were available. This situation is illustrated clearly by JinàKìîyâ, just as it would be in the other varieties where farming is the mainstay of their subsistence:

(1) "to harvest" *kuvuna*

(a) 'maize' gʊ̀-bùkʊ́ʊ́là

(b) 'groundnuts-peanuts' gʊ̀-kùlà, gʊ̀-tònă

(c) 'cotton', 'tamarind fruit' gʊ̀-yòβà

(d) 'groundnuts', 'hardnuts' gʊ̀-kùlà

(e) 'millet' gʊ̀-gèsà

(f) 'sweet potatoes' gʊ̀-sìîmbà,

(g) 'beans (*Phaseolus vulgaris*)' gʊ̀-sòlà.

(h) 'vegetables to store for the dry season' gʊ̀-hʊ̀lʊ̀là

(i) 'second harvests after major harvests, gleaning' gʊ̀-pʊ̀ʊ̀mbà

(j) 'baobab fruit' gʊ̀-sàànzá

(k) 'simsim or sesame' gʊ̀-tèmǎ

(l) 'lentil' gʊ̀-dùbʊ̀là

(b) when an informant chose one context in which a word could be used, leaving out all the other contexts. To casual observers of the data, a non-cognate word appearing in a column might suggest that the variety in question had innovated or no cognates like the other varieties in the group could be found, and hence that variety or the word had a different history. For instance, an item like 'to be quiet', *ku-nyamaza* in KiSwahili, may be ambiguous to a speech community which distinguishes between the quietness of humans versus that of non-humans. In JinaKĭĭyâ, 'to be quiet' can be *gʊ̀-hùùmʊ́là* (for people who were talking, then stop), *gʊ̀-leembeela* (for winds or animals, which were previously making noise), *gʊ̀-fulĭkà* (for a person who was crying), *gʊ̀-chùléélà* (for a noisy, heavy rain).

(c) when a choice was required between formal versus informal words, the question was 'which style was required to use for research purposes especially with oral languages with no established canons for standard usage'? To an informant, any word would be produced here.

1.3.4.2 Informant's expected linguistic competence

Perhaps due to Tanzania's multilingual setting where KiSwahili tends to be dominant, some informants tended to forget some words more readily than others. How would one treat such cases of frequent and long silences? Would one engage other competent speakers or would one just continue with many blank spaces left in the questionnaires as a consequence? Blank spaces therefore sometimes imply that no item was found in the language, while it might in fact only mean that the informant forgot it and there was no time to go back to record the recalled word.

1.3.4.3 An informant refusing to answer some questions

For cultural reasons, understandably, some informants refused to tell a word because it was a taboo and embarrassing. For words like 'testicle, sperm, sexual intercourse, and penis', euphemisms were used instead of the referential ones expected. Respectively, the euphemisms favoured included equivalent metaphors like 'bells' (testicles), 'water of males' (sperm), 'sleeping' (sexual intercourse).

1.3.4.4 Desirability of trilingual speakers

This requirement was the most desirable since some words were only clearer even to the researcher if they were explained in both KiSwahili and English so as to be translated by the informant in his/her third language. For instance, some of the palm trees mentioned in the questionnaire were not known to the researcher himself in all the languages he knew. In other

cases the KiSwahili word was different in meaning from the English gloss. For instance, while the entry for KiSwahili was *ndezi* as particular kind of rat, for English it was only 'kind of rat'. On its own, that English noun phrase was almost meaningless because any type of rat fitted. When asked by the informants to be specific, the researcher himself did not know which rat was being talked about. Another example had *chungu* in KiSwahili and 'small ant' in English. The English gloss was again almost meaningless because there are many types of small ants. In addition, *chungu* also means 'bitter', or 'heap' in KiSwahili. So informants reading one gloss only would respond differently from both those who preferred the other language, or who used both.

Sometimes words could not have equivalents in both the ethnic variety and KiSwahili, although it might be clear in English, and vice versa. For instance 'number" is *mwongo*, or *mulongo* in KiSwahili. But that word is no longer used in KiSwahili, and many languages have no such word. A monolingual informant would not grasp what the researcher was talking about in such cases.

With the names of mammals and birds especially, most informants were not sure which animal or bird was being referred to, because most of the informants had never physically seen the animals, while others have seen them, but were not sure which name to attach to which animal. To save face and to appear committed to the interview, some informants did not like to admit that they did not know. They said something, sometimes so obviously unacceptable

even to the researcher who spoke a different language because of having some understanding of some of the common names, that it was almost funny. This reflects what Whybrow (1948:56) observed when he was compiling a list of bird names in βʊ̀sùkúmà (Sukumaland):

> There is rather a tendency for Sukuma, and doubtless other tribesmen, to invent names on the spur of the moment for the sake of pleasing the enquirer. A regular informant is soon cured of this, but one must be on guard with the casual.

1.3.4.5 Rejection of some words during data revision.

The original data used in this study were taken from 12 language varieties. The second version included ten more which were obtained by differentiating the varieties within groups originally represented with fewer members or viewed as mono-dialectal as in KìnìLàámbà (two additional dialects), KìKíímbʊ̀ (one additional variety), SiSúúmbwà (two more varieties), and KìNyàmwéézi (three more varieties). While KìRìmi had originally two varieties, another was added. On the other hand one variety was completely new to the list, and this was ìCìWʊ̀ʊ̀ŋgʊ̀.

The major problem in this revision and update exercise was that some words found in the original list were rejected as alien in the informant's language. In other cases, some new words were added, while in other instances the words expected were not known in the language (at least to the informant). Since the original data did not include tones, the whole original list was not incorporated into the new one apart from its use during elicitation and confirmation of whether a word was available for the concept being asked, or whether the earlier words supplied were acceptable. Surprisingly, some of the words were rejected as

improper, either because they did not belong to the language, or their meanings were simply wrong. But this alone did not guarantee that all the new words were acceptable in the contexts given. Thus, caution is to be exercised while analysing the words, for errors of choice by informant, perception and recording by the researcher might show up in the data and skew or taint the results.

1.3.5 The methods

The comparative method was employed in Chapter 3 in analysing the phonological development of SSN and Zone F generally. Part of Chapter 4 employed lexicostatistics in establishing the internal relationships within SSN and Zone F as a quantitative measure, while the remaining part used the comparative method again to trace the qualitative similarities and differences in the target varieties and surrounding languages of eastern Africa.

1.3.5.1 *The comparative method*

1.3.5.1.1 The procedures of the comparative method

The comparative method in Bantu was first applied consistently and to a large scale by Bleek, Meinhof, Dempwolf, Bourquin and Greenberg. Guthrie (1962a, 1967-71, 1970) acknowledges those predecessors generally for their inspiration in his own work in Bantu (Guthrie 1962a:2). Others who followed the pioneers elaborated and continued to refine and apply the method, for example, Lestrade (1948), Meeussen (1973); Bynon and Mann (1973); Nurse and Hinnebusch (1993), Nurse 1999), among others. As Meinhof himself had

said when utilizing the method, it is applied as it had worked in Indo-European languages (Meinhof 1932:21, Guthrie 1962a:2)

Guthrie (1962a:4-23) characterizes his version of the procedure as involving two stages. as Meeussen (1973:16-18) also elaborates:

(a) Every rule formulated is to be free from exceptions.

(i) comparative series: setting up completely regular sound correspondences.

(ii) starred forms: symbolizing the proto-phonemes to represent the sound correspondences obtained in (i) as underlying forms, (although strictly speaking, protoforms are not underlying forms, although they are often identical).

This can be illustrated from Zone F, thus:

(1) ashes *-bu

F21a i-βù/mà-βù	F23a mà-vù	F31a mà-û	F34 yù-ù
F21b-βǔ/mà-βǔ	F23b i-vù/mà-vù	F31b mà-ù	F33 ì-vù
F21c ì-βù/mà-βù	F23c í-zù/mà-zù	F31c mà-ù	
F22b i-βù/mà-βù	24b má-ù	F32a mà-ù	F10 (i/ma-fúúndù)
F22d i-vù/mà-vù	24a má-ù	F32b mà-ù	F22a (mà-tùùndè)
F22e i-wù/mà-wù		F32c mà-ù	F25 (i-twiitwi)

(b) from the cognates obtained in (a) by the sound correspondences, it is possible to assign phonetic values to the proto-phonemes and classify the comparative series into well-defined categories of reconstructions, although this assignment is not easy.

1.3.5.1.2 The aims of the comparative method

As can be observed from the brief description of the comparative method, the aims of the procedure are to establish genetic relationships between languages claimed to descend from a single ancestor. This assumes that languages are monogenetic. Guthrie (1970:23) himself was aware of this monogenetic assumption of the method as he aptly points out:

> It is the total collection of material of this kind that gives rise to the presumption of some kind of genealogical relationship among the various Bantu languages, but ***it would be an oversimplification of the problem to decide outright that therefore all the Bantu languages should be treated as direct descendants of a single ancestor language.*** It may not be out of place here to consider for a moment the significance of a ***family tree as a representation*** of the ***inferred prehistorical development of various languages from a common ancestor. Sometimes several languages are shown as all being genealogically related to a single parent language, but this could in fact be a considerable oversimplification***. [Emphasis added].

With this caution sounded by Guthrie in mind, it is only becoming to look at the limitations of the comparative method, albeit very briefly.

1.3.5.1.3 Limitations of comparative reconstruction

Like all methods in both natural and social sciences, the comparative method does not represent a panacea in historical and comparative linguistics, able to handle all questions of application and interpretation arising theoretically or in the field in relation to Bantu, and

indeed, to linguistics in general. While the method is practical and useful, criticisms relate to both the method itself and the interpretation of the results obtained through it. With regard to method, its application depends to a large extent on earlier data of a language in order to ascertain the validity of the reconstructions. In oral cultures like most of Bantu, such earlier, written forms of language are absent, and therefore applying the method is relatively more difficult and challenging. In addition, for the method to succeed, it requires quality data of enough quantity in order to obtain reliable and valid results. But this could be said of any method.

Secondly, interpretation of the results obtained through the method may be difficult because an accurate, historical interpretation requires, as a precondition, sound assumptions about the nature of language, language change, historical processes and human agency, including all the factors affecting that combination of phenomena.

Thirdly, there is considerable debate which has continued for years about the relative role of inheritance versus language contact/convergence in explaining current situations in languages. The comparative method cannot address language contact because it favours monogenetic treatment of data. The method only handles some type of data, and leaves the rest. If one allows for the existence of dialects in languages, then proto languages should not be an exception. This implies that, it is one method among several rather than being *the* method. It is useful without being perfect, like lexicostatistics, its efficiency in application being only

relative.

1.3.5.2 Lexicostatistics/Glottochronology[10]

1.3.5.2.1 Overview of lexicostatistics

This overview considers the criticisms against lexicostatistics and the reasons why it has been used despite those criticisms, and hence warranting this lengthy treatment. Some excellent literature exists in the field of lexicostatistics (and glottochronology) dealing with both its theory and practice, either in its support, neutral application or criticism as in all scientific endeavors . Among these are Swadesh (1950, 1955) who first popularized the method, Fairbanks (1955), Gudschinsky (1955, 1956), Kroeber (1955), Taylor and Rouse (1955), Hymes (1960a, 1960b,1964); Amstrong (1962), Bergsland and Vogt (1962), Grace (1964), Dyen (1965, 1975), Henrici (1970), McElhanon (1970), Hinnebusch (1976, 1999), Nurse and Philippson (1980a), Schadeberg (1986), Embleton (1986), Dyen, Kruskal and Black (1992), Ross (1998), Ehret (2000), among others.

In the earliest stages of the method, lexicostatistics and glottochronology were used interchangeably. While lexicostatistics is the statistical study of a restricted vocabulary in two or more languages for historical inference and/or relative chronology, glottochronology is the same thing, but only estimates exact time depths between a pair of languages or groups

[10] When lexicostatistics is mentioned, glottochronology is excluded, unless explicitly stated.

as a measure of absolute chronology, for historical inference (Hymes 1960a:4, Hinnebusch 1999:174). The focus in this study is lexicostatistics, while the application of glottochronology is also attempted to test the lexicostatistical results, since lexicostatistics is a process which gives output to be used by glottochronology as its input. That is, glottochronology is a technique of dating the nodes of shared vocabulary generated by lexicostatistics. As can be seen, the connection between the two is inevitable and important in many ways.

In its evolution, glottochronology (at the time) or lexicostatistics as it became to be known later, was inspired by Carbon 14 (C^{14}) dating technology (Gudschinsky 1956:1, Embleton 1986:43, Hock and Joseph 1996:531). The method uses a formula which has been refined over the years, as shown in (2), where t, expressed in millennia, is elapsed time since 2 languages that are compared separated, C is the percentage of the shared cognates between the compared languages, and r is the standard rate of core vocabulary retention per 1,000 years, or the index, recommended at 86% in a 100-word list and 81% (80.5%) in a 200-word list (Swadesh 1950:158, Embleton 1986:49).

(2)

$$t = \frac{\log C}{2 \log r}$$

Since many of the support of and/or objections to the reliability and validity of the results of glottochronology and hence lexicostatistics are based on the assumptions of C^{14} and the above formula, it is essential to provide four assumptions here as aptly summarized by Gudschinsky (1956:177-8):

(a) Basic core vocabulary is assumed to be less subject to change than other types;

(b) The rate of retention in basic core vocabulary is constant through time, (although no evidence was provided to substantiate that claim (Kroeber 1955:91));

(c) The rate of loss of basic vocabulary is approximately the same in all languages (11 Indo European and 2 other language family test languages were used to arrive at that generalization);

(d) A known percentage of shared vocabulary between two languages can yield the length of time that has elapsed since their divergence from their common ancestor, provided that there was no interference through migrations, conquests, or other social contacts with other speech communities which would slow or speed up the divergence.

With that scenario, it makes sense now to examine some of the comments which have been made concerning the application and interpretation of the results of lexicostatistics and glottochronology. This helps in appreciating the merits and shortcomings of the method by avoiding exaggerating its shortcomings or undermining its usefulness.

On the one hand, lexicostatistics has been adequately applied to SSN and Zone F languages by Nurse (1979a, 1979b), Nurse and Philippson (1980a). In those studies, one finds patterns of linguistic groupings which do not depart very much from the results of other, more traditional methods. Such corroboration indicates that lexicostatistics does indeed work and is useful in internal classification where relatedness is shown clearly among members of a subgroup (Nurse 1997:364). To put this in perspective, the criticisms put forward against lexicostatistics are discussed first. There then follows a justification for using this method in this study despite such strong criticisms, indicating that we are aware of the problems.

1.3.5.2.2 Arguments against lexicostatistics

Many scholars see both sides of the coin in judging the method by giving credit where it is due, without failing to point out any weaknesses. Some take one stand only, for or against the method. For instance, while recognizing the usefulness of the method, Nurse (1997:364-6) directs some specific criticisms against lexicostatistics, and four are more serious because they concern the method itself rather than how it is applied:

(a) the method does not clearly distinguish true cognates from mere resemblances, but depends on how an individual researcher recognizes and excludes non-cognates.
(b) it forces binary splits even when a three split might be more appropriate.
(c) it allows geographically proximate languages to behave lexicostatistically similar as if they are genetic relatives even when they are not (Henrici 1970:89-91) and

(d) there is no agreed upon cut-off percentage for languages to be classified as daughters of a proto language.

Apart from those specific problems, more general shortcomings of lexicostatistics were recognized early by Swadesh himself and many others when they were dealing with linguistic dating (Swadesh 1950, 1955; Taylor and Rouse 1955). The problems relate to both the quality of the data and the mathematical derivation and hence mechanism of the method itself . Both the data and method undermine the basic assumptions of lexicostatistics in significant ways, which in C^{14} terms, introduce contamination in the linguistic samples. Among these weaknesses include inaccurate transcription of the phonetics of the vocabulary collected; errors in translations which result in unexpected meanings; the absence of worked out phonological systems as a check for errors; and over-or -underestimation of time depths, etc. For some linguists, such shortcomings are unwelcome, justifying a rejection of the whole enterprise as unredeemably hopeless. In this scenario, the method is dismissed as unfit of serious attention because of its many misleading errors.

For instance, Bergsland and Vogt (1960:125-9) represent the skeptical school which views the reliance on the method to calculate time depths as premature due to the vagueness of the procedure. To prove their point, they point out that basic vocabulary does not change at a constant rate; a few vocabulary items in a few languages cannot be generalized to human language as a whole; and a study of vocabulary was more complex than glottochronology

could handle. The controversy is summarized well by Embleton (1986). Dixon (1997:4, and footnote), gives a verdict that lexicostatistics was a short cut which failed and was discredited because it was based on illicit assumptions like uniform replacement of vocabulary, or that core and non-core lexemes behaved differently. Dixon concludes that the method has already been discarded by serious linguists. Similarly, Hock and Joseph (1996:530-31) dismiss the method as unreliable because it depends on interpretation rather than facts alone. In addition, its findings are often disconfirmed by empirical evidence.

Another criticism is the argument of forcing statistical or mathematical precision in a social science like linguistics in an attempt to make it a respectable discipline deserving attention like those in the natural sciences.

While the twin methods are different in their aims, the attack on glottochronology was especially encouraged by its association with lexicostatistics. The terms were sometimes used synonymously, although a distinction between them is clear, namely that glottochronology deals with an absolute measure between points A and B of language development while lexicostatistics' value is relative. It was that absolute measure that drew the most criticism because in known cases, the margin of error was so vast that many linguists doubted it, while others rejected the method as flawed in its mathematical assumptions (Bergsland and Vogt (1962); Grace (1964:64-5), Herbert and Huffman (1993:64). For instance, Armstrong (1962:284-5) shares the same sentiments about glottochronology in its tendency to

underestimate the time depths being considered. Armstrong argues that it is difficult and controversial to determine the rate of change of basic vocabulary and prove empirically that it is the same for all languages. In addition, it is tricky to assume that because a few languages with written records changed at a certain pace in a certain number of centuries, therefore their rate of change was the same during their past unwritten period. Rather, it is the case that such a rate cannot be uniform for all other languages in all places in the world in all millennia. While appreciating the merits of the method for its immense value, he also acknowledges that glottochronology is a speculative and hazardous intellectual venture whose results and methods are not satisfactory.

Overall, most of the criticisms which dismiss lexicostatistics completely fail to appreciate the fact that almost all scientific methodologies, while proven to be practical, have their drawbacks. Instead of rejecting lexicostatistics out of hand, some latitude can be usefully allowed as better ways are searched to perfect the method, as a core of the evolution of science. Fair criticism, therefore, implies not only the recognition of the weaknesses of a method, but it also involves an appreciation of its practical utility, since, as in the case of lexicostatistics, there is ample room for improvement. That benefit of doubt has not been granted fully by trying the method on many languages, as the following school of thought suggests.

1.3.5.2.3 Merits of lexicostatistics

From earlier on, such usefulness of lexicostatistics was appreciated by many linguists (Swadesh (1955), Gudschinsky (1956), Hymes (1960a, 1960b,1964); Henrici (1970), Hinnebusch (1976, 1999), Schadeberg (1986), Embleton (1986) , Renfrew (1997), Nurse (1999) and Ehret (2000)) who view the enterprise as practical enough since no method is perfect and cannot be used alone as a panacea for providing all the solutions to all problems. For instance, Hymes (1960a,b) recognizes and discusses many problems, starting with the test list itself which had mainly Indo European words at first, some of which were found irrelevant in some non-Indo European languages; the control cases were not satisfactory since most had no earlier documentation; the retention rate was doubtful, since the lists used are normally not identical in terms of vocabulary items and length, with the 100 and 200 word-lists giving different retention rates; the statistics and mathematics are based on assumptions which are only hypotheses, giving even more hypothetical results since the rates of lexical change, for instance, are not known in the majority of world languages. He concludes that there is room for improvement.

Although Ross (1998:142) points out that glottochronology as a direct application of lexicostatistical output is unreliable in many languages, in the rare cases of languages like those of Polynesia, the twin methods work quite well because the languages were almost isolated from contact with other languages outside their family.

Hinnebusch (1999:177) commends another advantage of the method, that of providing evidence for contact, apart from determining levels of retention alone. Similarity between language varieties cannot be by genetic affiliation from a proto-language alone. It can also be due to borrowing through contact and lexicostatistics can show that.

In most of Africa where the dating of prehistorical events is difficult, the questions raised against glottochronology become important. Many dates have been suggested for the ages of artefacts and events in Africa, but the major contention revolves around the methods of dating them and the assumptions inherent in those methods. The methodological problems of dating archaeological artefacts and establishing time periods and sequences for them is a major problem where there is no evidence of written records of dates attached to them. Hence, in this study, absolute chronologies in linguistics, history and archaeology are approached cautiously since the dating techniques are not reliable.

1.3.5.2.4 Merits of lexicostatistics: a summary

All methods are essentially hypotheses trying to account for something which is unknown. Their chances of success are only matters of degree and preference rather than absolute dichotomies of right and wrong. They only aim at as objective truth and as reasonable success in providing answers as possible.

For instance, the comparative method as a practical enterprise has its own serious problems,

although it has been used for years. Because languages do not exist in a vacuum, its monogenetic implication is definitely flawed. In real life, languages are spoken by people and speech communities in constant interaction, and total isolation is an exception than the rule. For instance, Indo European is only one intermediate node in the linguistic tree of its ancestors, Nostratic. Even Nostratic did not exist alone. There were other languages influencing it. Although this might sound speculative, the scenario of language contact in prehistory is not handled well by the comparative method.

In addition, lexicostatistics suffers from lack of engaged evaluation from most of the linguists themselves. The mathematics involved in the lexicostatistics formula deals with advanced probability theory which for many linguists is not their area of competence. The result is continued reliance on the judgement of others, which is not always accurate either. For instance, Embleton (1986:62) points out that the criticisms by Chrestien (1962) were known by statisticians and mathematicians to be flawed, but those statisticians and mathematicians could not contribute to the debate because they were not certain what linguistic arguments were involved in that formula. A team of individuals each trained as a linguist, programmer, statistician and mathematician could do a better job by researching the area over a period of time.

The bottom-line with lexicostatistics is that some particular methodologies like the comparative method tend to be privileged even when they have their limitations, while equally

promising ones tend to be dismissed because they remain 'new' for lack of wider application and continual improvement.

1.3.5.3. Other methods

As hinted earlier, a method like mass comparison is not used in this study. One reason is that mass comparison, for instance, best suits analyses at macro-, rather than at micro-level where dialects are compared, as in this study. By using mass comparison whereby the vocabulary and morphology of many languages are compared to determine similarities, Greenberg (1963) succeeded in drawing up a convincing taxonomy of the four language phyla then predominant in Africa, namely, Khoisan, Afro-Asiatic, Nilo-Saharan and Niger-Congo.

The methods used in archaeology and which furnish evidence of chronology, pose a special challenge in many societies in Africa. The evolution of human societies in the past relied on harmony with nature where the environment was rarely altered. In such cases, no traces could be found of any artefact. This implies that dating has a long way to go in prehistoric studies, but especially in societies which left no objects to fall back on when all else failed. But also, the age of human existence tends to be underestimated and linguists and historians alike talk of Bantu migrations and expansion in terms of a few hundred years ago based on material objects found on the ground. Such objects depend on human agency, and when they are not made, then any dating relying on them fails. The absence of such finds tells us nothing

of the history of the people living there except that they did not alter nature or leave their implements. Gathering societies which depend solely on plants and insects for their livelihood may leave no trace of their activities. Many Bantu societies might have lived in such an environment of abundant natural resources for an unknown number of centuries.

1.4 CHAPTER PREVIEW

The rest of the chapters in this study are arranged with the following content. Chapter 2 contains the literature survey, including overviews, that of the linguistic research undertaken in the area and the theoretical framework. The linguistic component surveys three areas: phonology, lexical analysis and classification in SSN and Zone F. The major theoretical framework adopted is the contact models of language development as suggested by Thomason and Kaufman (1988), along with the family tree model.

Chapter 3 maps the phonological development of Zone F generally, and SSN in particular, and finally, attempts a historical interpretation of the linguistic patterns, especially the chronology of the phonological processes defining the linguistic groups in the target languages. Chapter 4 maps the development of lexis, looking into quantitative and qualitative evidence for Zone F and SSN, while Chapter 5 concludes the study by synthesizing the foregoing. It also makes final observations, recommendations, and points out avenues for further research, looking briefly at language as a tool of history in the area.

CHAPTER TWO

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.0 INTRODUCTION

This survey of the literature reviews what has been written about SSN, Zone F and where relevant, Bantu in general. In particular, it focuses on what has been done in phonology and lexis. In phonology, it reviews work done on BS, 7 > 5, DL as major areas, and glottalization and voiceless nasal formation as minor processes, especially within SSN. With respect to the lexicon, lexicostatistics and its classificatory results are discussed in relation to the role of the method as an ordering tool where there is still taxonomic chaos due to the sometimes enormous knowledge gaps in Bantu studies. Finally, classification in SSN and Zone F generally is examined as it relates both to our phonological and lexical focus, as well as to other criteria used by other scholars. The aim of this chapter, therefore, is to see what is known about the area with regard to what has been done and its merit; what criticisms can be levelled against that knowledge; where the contribution of this thesis fits in; and therefore why the work is worth doing.

2.1 LITERATURE REVIEW

2.1.1 Bantu, Zone F and SSN linguistic descriptions

From the pioneers of Bantu linguistics like Bleek (1862-9) and Meinhof (1932), the major work on Bantu comparison and classification is represented by two undertakings, the seminal work of Guthrie (1967-71), on which Nurse (1979b:43) states supersedes all previous work, and Meeussen (1980). Guthrie makes a referential classification of the majority of the Bantu

languages based on phonological, grammatical, and lexical criteria by listing all known Bantu languages and their dialects. He goes on to reconstruct about 2300 Bantu roots (Guthrie1962b:274, 1962c:13). Meeussen, on his part, reconstructs about 1200 Bantu roots. Following in the footsteps of these two, many historical linguists have compared several languages and language groups, mainly using vocabulary, verbal morphemes and phonological systems, although they have not attempted any work of reconstruction of the magnitude of Guthrie and Meeussen. For an overview of the evolution of Bantu scholarship, especially on classification, see Nurse (1995) who summarizes the achievements attained so far, especially by Henrici (1973), Heine (1973), Möhlig (1981), Bastin (1983), Coupez, Mann and Vansina (was in progress[1]), and Ehret (1994). He gives a critique of each work, and then identifies the work required to be done in the future to fill the gaps observed in those works, pointing out five areas, four of which are relevant here (Nurse 1995:71-3).

First, Nurse says, linguists should obtain good quality data of sufficient quantity rather than continuing with the prevailing practice of using incomplete and inadequate information to make global generalizations. This aim has not been realized yet in full, since the data used are still mainly second-hand, often collected many years ago when transcription was not yet fully standardized and knowledge of Bantu was still generally poor. This fact is illustrated by the case of Bantu Spirantization or Dahl's Law, in which some languages are said to have those processes, when in fact they do not. This is addressed fully in Chapter 3.

---

[1] Work was in progress then (1995), involving many Bantu languages/dialects (450+) based on lexicostatistics, interpreted historically. Published and became Bastin, Coupez and Main (1999).

Secondly, new approaches not based on lexicostatistics were needed to tackle intermediate levels of Bantu instead of concentrating on the lowest and highest, at dialect and Proto-Bantu stages respectively. These new approaches would then be compared with the results of other methods like lexicostatistics. This recommendation has not been realized too. One problem here is that the majority of the lower level dialects have not been subjected to lexicostatistics to establish their internal relationships so as to move to the intermediate levels with solid lower level linguistic cohesion and grouping. Normally, one dialect was taken to represent two or more dialects, as in the case of KINyamweezi or SiSuumbwa. Without proper analysis of all dialects, it is impossible to have accurate information on the intermediate levels. This study tries to address precisely that, using lexicostatistics.

Thirdly, linguists and other scholars working in different areas of Bantu needed to cooperate so as to simplify such a daunting task as Bantu research. Working in isolation led to duplication and dissipation of effort and slowing of new knowledge generation. This recommendation has seen a lot of activity, one example being the revision of Guthrie's coding system with a view to improving it by incorporating excluded languages and their varieties[2].

And finally, Nurse also recommends that those interested in Bantu linguistics be multi-disciplinary in their approach in order to be informed of how other related fields view and use their disciplines. As we have observed in *1.3.5.2.4* , a multi-disciplinary approach in linguistics will go a long way in areas like evaluating effectively methods like lexicostatistics

[2] D. Nurse and J. Maho, p.c. (2001)

which are not linguistic in nature but which linguists find quite useful.

With that scenario in mind, a survey of some relevant work is in order here. The earliest classification of Bantu as a big, unified group was most likely the work started by Dr Peters who collected some vocabularies and gave them to Dr Bleek in 1852. For his part, Bleek, who was trained in Indo-European philology, studied these manuscripts, translated, edited and published them (Meinhof 1932:21, Doke 1959:26). That was the beginning of the term "Bantu" and the study of the language group using purely linguistic criteria. Bleek had isolated 18 noun classes of Bantu nouns, spurring other linguists to classify the various members of the group into patterns of similar sub-groups, including Zone F and SSN.

Most of the work done in the Zone F languages has been mainly synchronic, that is, as they are spoken at a given single point in time. The work has been general, describing the grammar, vocabulary and sound systems of individual languages or their individual varieties rather than analysing all varieties comparatively. For some of these varieties, the lack of linguistic scholarship in this regard still continues since they are only mentioned, and in many cases some are not even mentioned[3].

---

[3] These include F21b, F22a, F22d, and F23c from SSN. From the rest of Zone F the following are only mentioned without any description whatsoever, while some are not even included, as far as this author is aware: F10, F31a, F31c. For instance, the bibliographies of Bantu language materials in general held by individuals and public libraries are seriously lacking, as shown by Downing (1989). Without specifying dialects, Downing shows for instance that only two general works mention SiSúúmbwà (F23) since 1880; seventeen sources appear for KìSùkúmà (F21); thirteen documents for KìNyàmwéézi (F22); two mention KìKíímbò (F24) and nothing appears for the other varieties of Zone F. Polomé (continued...)

In all the languages studied, most of the word lists were compiled by missionaries and adventurers who were language enthusiasts keen on obtaining quick, practical results rather than elaborately accurate phonological descriptions of trained philologists. Hence they cut corners, approximating what they saw and heard to what they already knew, without any rigorous method of systematic categorization. Doke (1959:1-2) also points out that few of these travellers had any real ability in correct observation and recording, and most of their records were only interesting relics of no philological value. With such compilations, one would normally only find some bits and pieces of linguistic description, reconstruction, classification and historical interpretation done amateurishly. Among others, this linguistic work has included the following, shown in *Table 2.1*.

Table 2.1 Work done in Zone F languages

Language	*Author*	*Area*	*Focus*
F21	Richardson (1959)	phonology-tone	JinàKìîyâ
	Richardson and Mann (1967)	vocabulary list	JinàKìîyâ
	Masesa (1978)	verbal morphology	Kìmùnàdàkàmà[4]

F21

[1](...continued)
(1980) lists fourteen sources for KÌSùkúmà since 1945, six of which are typewritten manuscripts. Most of these manuscripts are not dated, do not show place of composition and are written anonymously. Reviewing publications in F23, Kahigi (1988:6,7) comments that, like all Bantu languages, F23 does not have a long written tradition as a starting point, as is the case with other language groups like Proto Indo-European and its daughter languages. The earliest published record for F23 is that of Last (1885), a collection of several Bantu language vocabularies, including that of F23, with a 250 word list.

[4] Masesa does not indicate the exact location of this dialect, although by the examples (continued...)

Language	*Author*	*Area*	*Focus*
	Goldsmith (1985)	phonology, tone	KìmùnàSùkùmà?
	Batibo (1985)	morphology and phonology	KìmùnàSùkùmà
	Yukawa (1989)	tonological	General F21[5]
	Maddieson (1991)	voiceless nasals ('aspirated' nasals)	KìmùnàSùkùmà
	Batibo (1991a, 1991b	phonology, tone	KìmùnàSùkùmà
	Masele (1993)	phonetics, voiceless nasals	JìnàKììyâ
	Masele (1996)	phonology, homorganic voiceless nasals	JìnàKììyâ
	Masele (2000)	phonology, tone	JìnàKììyâ
F22	Maganga and Schadeberg (1992)	grammar, vocabulary and phonology	KìNyâmwéézi or KìDàkámá?
	Silanda (1978)	phonology	KìKónòóŋgò
	Schadeberg (1991 1994)	phonology, high tone	KìNyâmwéézi general?
F23	Kahigi (1977, 1988)	phonology	Lunzewe (F23a)
F32	Olson (1964)	phonology, morphology	GìRwànà
	Schadeberg (1979)	phonology, nominal tones	KìRìmi general?
Zone F	Nurse (1979a)	syntax, morphology, phonology	F21, F22, F23, F31, F32
	Nurse and Philippson (1980a)	lexicostatistical	F21, F22, F23, F24, F31, F32, F33
Bantu	Meinhof (1899/1932)	phonology, lexis	Sample Bantu

[4](...continued)
he gives, his KÌmùnàdàkàmà is our JìnàKÌìyâ which adjoins our KÌmùnàdàkàmà, and his JìnàKÌìyâ our GÌnàntùzù. This is the problem of directional names which only indicate position relative to speaker's/writer's location.

[5] General F21 or any other language refers to a situation where an author did not explicitly say what dialect s/he was analyzing, or when we are not sure which dialect.

2.1.2 Phonological studies

2.1.2.1 Bantu Spirantization (BS) and 7 > 5[6]

Bantu Spirantization is a weakening process in some Bantu languages whereby plosive consonants change into spirants before the superclose PB *ị and *ụ vowels, making their reflexes different from reflexes of plosives in other vowel environments [-superclose]. Hinnebusch, Nurse and Mould (1981:17), Nurse (1988:29) suggest that BS was only beginning in F21 and F22 because of the evidence of both complete and incomplete forms of BS being attested in words, in addition to the strong 7 vowel system, indicative of an ongoing process. But Nurse (1999:21), while sure about the absence of BS in F24, F31, F32, states that the evidence is ambiguous in F21/F22. This observation of indeterminate BS in F21/F22 is also made by Batibo (2000:25-26) who suggests that BS has become inactive, although it operated in the past. Since the observations made so far are based on general data from these languages, this study examines the details in the individual dialects to determine to what extent these observations are true, whether there is ongoing BS, inactive BS, or ambiguous BS in F21/F22, for example. Some of these statements are confusing and contradictory since they refer to the same phenomenon in the same languages. What do such differing observations mean historically, especially when innovations like BS co-exist with 7V systems?

Using Guthrie's inventory, Schadeberg (1995:83) surveyed representative languages from all Bantu zones. In Zone F, 4 languages were selected: F10, F21, F31, and F33. His results

---

[6] A full treatment of BS and 7 > 5 is found in Chapter 3. They are treated together because of their close causal relationship.

indicate that F31 has neither BS nor 7 > 5, while F10 has both. On the other hand, F21 and F33 do not show 7 > 5, but they have BS. Since Schadeberg's concern was a summary of a general area, he did not go into the details of each individual language to examine how the twin processes worked . In addition, only a few Zone F languages were used, and only one of the three from SSN. The work therefore offers a challenge to explore BS details in all Zone F languages to determine how the results of the 4 languages used by Schadeberg can be generalized for Zone F or SSN.

On her part, Labroussi (1999) mentions the case of F25 which shows clear BS with some words in the same environment failing to undergo BS. This casts doubts on whether F25 has real BS or some other process mimicking BS. Another doubt cast is the status of the vowel inventory: while the young informant shows a 5-vowel system, the older informant indicates clear 7V. Labroussi (1999:370) then concludes that, F25 has a conservative 7V system, adding that it is an abnormal pattern of BS in an innovative language needing an explanation. This might possibly be a result of contact with BS languages. Such uncertainty of BS in F25, as elsewhere in Zone F is a good reason to re-examine Labroussi's conclusions, which may cast crucial light on BS in the rest of Zone F vis-à-vis the observations made by the studies mentioned above.

2.1.2.2 Dahl's Law (DL)

Dahl's Law is a dissimilation process of two adjacent syllables with voiceless obstruent onsets in a root, found in some eastern Bantu languages, whereby, the first obstruent, usually a

plosive, becomes voiced, as in PB *-kopa → F21c /-gopa/ 'borrow'. It is realized differently by different languages, as explored fully in Chapter 3. According to Nurse (1999:20-21), DL is found in six groups in eastern Bantu. The codes in brackets indicate the rough individual groups involved according to Guthrie's zones: Proto Central Kenya (E46, E50), Proto Kilimanjaro-Taita (E60, E74), Proto Great Lakes (D40, DJ50, DJ60, EJ10, EJ20, EJ30, EJ40), Proto Northeast coast (NEC) (G10, G20, G30, G40, parts of E70), Proto West Tanzania (Zone F), and Proto Southern Tanzania Highlands (G60, N11). In Zone F, some languages have DL, others have none. For instance, in F24, F31, F32, F33, there are no traces; in F23, there are limited traces; while in F21/F22 there are many traces (Nurse 1979b:422). Those with no DL pose no immediate problem. It is F21/F22 and F23 which form SSN that are interesting. In our preliminary data, most of F22 shows doubtful DL or none at all, except in loans. However, Maganga and Schadeberg (1992:23) suggest that DL in F22 (KINyamweezi) is almost exceptionless. On the other hand, our data suggest that F23 does not have DL except in a few loanwords (See *Appendix 3*). In light of these inconsistent reports, the examination of all dialects within Zone F, but especially in SSN hopes to clarify the fuzzy picture of DL in the area and aid in a more robust fashion the classification of the language varieties.

2.1.2.3 Glottalization

Glottalization as a change of PB *p to /h/ in many Bantu languages is not significant on its own. Its importance lies with regard to SSN when one finds reflexes of PB *p being both /p/ and /h/, which is a marked situation. Addressing this situation, Batibo (2000:27-8) observes

that glottalization has ceased to be active in F21/22, with /p/ becoming more widely distributed than /h/. Like BS and DL, the inactivity of glottalization suggests two scenarios: on-going process or the presence of loans (Batibo:ibid). Such indeterminacy needs clarification by examination of the various dialects as proposed by this study.

2.1.2.4 Voiceless nasal formation

Within Zone F, only F21 and F22 display this feature. Voiceless nasals /m̥, n̥, ɲ̊, ŋ̊/ are in opposition with their voiced nasal counterparts /m, n, ɲ, ŋ/. The evolution of these voiceless nasals seems to have first started as pre-nasalized consonants /mp, nt, ɲc, ŋk/ respectively. With time, they were phonologized so that they are now phonemes which can be contrasted with both the plosives and voiced nasals. The voiceless nasals from KImunaSukuma are discussed in Maddieson 1991 and from JinaKIIya in Masele (1993, 1996). Some examples are shown in *Table 2.2*, with contrastive minimal pairs or similar words with voiced nasals where available. The tones given are underlying for each word, low where tones are not marked.

Table 2.2 Voiceless nasals in F21c

m̥	n̥	ɲ̊	ŋ̊
naam̥ală 'old man'	muun̥ʊ 'person'	muuɲ̊ă 'maiden'	ɪgooŋ̊o 'etched log'
m̥elă 'rhinoceros' -melă *vt* 'tease'	n̥ɪga 'giraffe' -niga 'strangle'	βaaɲ̊â 'female proper name'	ŋ̊ɪɪndá 'bell' ŋ̊iindâ *adj* 'half full'
-ɪguum̥á *vi* 'trip'	-daan̥a 'climb & creep'	-nuuɲ̊a *vt* 'smell'	-nuuŋ̊a *vi* 'smell'

Our preliminary results suggest that it is only F21 and F22b which have voiceless nasals, while the core dialects of F22 and F23 do not. This distribution within F21/F22 prompts a closer look, since DL also seems to follow the same pattern, where only F21/F22b are involved fully. Maganga and Schadeberg (1992:16-7) do not say whether these voiceless nasals are also found in all the KɪNyamweezi dialects. This study makes that distinction clear by noting the behaviour of each individual variety.

By combining these phonological processes: BS, 7 > 5, DL, glottalization and voiceless nasal formation in SSN and Zone F from the dialects, it is hoped that some concrete classification can be suggested, especially if it departs from the current affiliations.

2.1.3. Lexical studies

In this area, it is the seminal work by Nurse (1979a, 1979) and Nurse and Philippson (1980a, 1980b) which feature prominently. These studies employed lexicostatistics to analyse broader coverage of eastern Bantu languages, including Zone F and SSN.

Among these, Nurse and Philippson (1980a) is the most relevant. In this study, a 400 word-list was used, and 76 languages/dialects were compared for both internal and external relationships. Inter- and intra-zone comparisons were made, and the results for Zone F were as follows: Zone F without KiiRaŋgi was a strong unit, although when KiiRaŋgi[7] was added,

[7] The long vowel [ii] in KiiRaŋgi is a result of two short vowels from two syllables ki- as a marker of language, and the initial [i] in i-Ra-ŋgi, the root. In SiSuumbwa, as in many (continued...)

it became weak because of the distant relationship. The zone (which they called West Tanzania) divided into two: F21, F22, and F23 on the one hand, and F24, F31 and F32 on the other. Of these, F21/F22 formed the strongest unity , prompting Nurse and Philippson (1980a:48) to state confidently that they were 'dialects' of one language. In the other group, F24 displayed interference from West Ruvu (G10 and G39), while F31 and F32 were closer, forming another unit.

On the other hand, there were some problems of internal cohesion. For instance, F23 (SiSuumbwa) did not fit quite well within F21/F22, since its shared vocabulary percentage was higher with both DJ60 and EJ20 than it was with any of the Zone F languages to which F23 was purported to belong. The interpretation given by Nurse and Philippson (1980a:40) was that F23 was heavily influenced by both DJ60 (Western Highlands) and EJ20 (Southern Rutara). A second problem was that F10, F25, and F34 were not included in their study because there were no data for the languages. And finally, only one language variety/dialect was picked for each language, as if these languages are strictly mono-dialectal. These three problems justify our study in which we reexamine the claims made utilizing all members of Zone F, by including the majority of their dialects.

2.1.4 Earlier Zone F and SSN classification

The evolution of Zone F language classification generally, and SSN in particular can be

---

[7](...continued)
other such environments it is the following [m] which triggers vowel length.

illustrated in *Tables 2.3, 4, 6, 7, 8, 9, 10* below. *Table 2.3* shows attempts represented by two periods in the work of Doke, that of 1943 and 1945 (Doke 1961:77, Cole (1961:85-6)). Others who followed him include Bryan (1959), Guthrie (1959, 1967), Nurse and Philippson (1980a) and Nurse (1999). In all these studies, the orthographic conventions of the authors have been adopted as far as possible, since the writing system has not been uniform among them, especially in representing language/dialect names. They are quoted verbatim.

2.1.4.1 Doke

The works of Guthrie and Doke are contemporary, and they might have influenced each other in significant ways, since their maps of the Bantu area seem identical except for a few details (Herbert & Huffman 1993:56-7). The following are the main features of Doke's work, as aptly summarized by Herbert & Huffman (1993):

(a) Doke did not confuse genetic and referential classification in his scheme. Genetic classifications mirror history, whereas referential ones do not.

(b) He distinguished between *group* and *zone*, whereby *group* refers to linguistic affinity, and *zone* more to geographical proximity than to linguistic phenomena.

(c) Doke's aim was not to provide an exhaustive list of all Bantu languages, but rather a list of the more important ones in a continuous work of improvement as information became available (Cole 1959:197).

Because of those features, Doke's work as one of the pioneers in the area was mainly tentative in an emerging Bantu specialization, without any rigid prescriptions, showing

difference in detail from what we know today, as indicated in *Table 2.3.* Much of the information known today was not available in his time. Doke's scheme is also used in other scholars' classifications for consistency's sake.

In Doke's 1943 work, Nyamwezi and Iramba are both in the Eastern Zone, forming two separate language clusters, while the rest of Zone F languages are not mentioned. The 1945 classification has Zone 50 or Eastern, with 11 groups. Nyamwezi forms a major grouping, 50/1, with two language clusters, Nyamwezi (50/1/1) and Iramba (Ilamba) (50/2/1. Sukuma, Sumbwa, Nyaturu, Galaganza, Konongo, Nyanyembe and Kimbu make up the dialects of Nyamwezi, and no dialects are indicated for Iramba. The other member, Irangi (50/7/4), belongs to 50/7 which is the East Central group, with members in that cluster including Zaramo, Sagara, Gogo and Irangi itself. The other Zone F languages like ìCìWùòŋgò, KiTòòŋgwè/KiBèèndè and KèèMbùwè do not appear.

Table 2.3. Evolution of linguistic classification in Zone F: Doke (1943 1945)

Major Classification	Language or cluster	Dialects
1943 (V) **EASTERN ZONE**	**(a) Nyamwezi, etc** **(c) Iramba**	- -
1945 **ZONE 50 (EASTERN)** 50/1 NYAMWEZI	**50/1/1 Nyamwezi**	50/1/1a Sukuma 50/1/1b Sumbwa 50/1/1c Nyaturu 50/1/1d Galaganza 50/1/1e Konongo 50/1/1f Nyanyembe 50/1/1g Kimbu
50/2 - 50/7 EAST-CENTRAL	**50/2/1 Iramba(Ilamba)** **50/7/4 Irangi**	- -

2.1.4.2 Bryan

The classification by Bryan (1959) does not aim at genetic relationship, but rather groups are presented as autonomous divisions and single units (Herbert and Huffman (1993:55), as shown in *Table 2.4*. Dialects are shown where relevant, as is the case with Nyamwezi with 4 dialects, including Sumbwa (also shown as KInaMweri), which other linguists regarded as a separate language. Sukuma has only one dialect, Kiya. The major problem here was lack of information. For instance, it is not clear why some languages were shown with dialects, while others were not. The method used is not explicit as to whether those languages without any dialects were designated so by field research nor whether they were recorded as informants reported them. It is also not clear whether the criteria for sub-grouping are linguistic or geographical, since geographically, these languages are adjacent.

Table 2.4. Evolution of linguistic classification in Zone F: Bryan (1959)

Major Classification	Language or cluster	Dialects
SUKUMA GROUP	**Sukuma**	Kɪya
	Nyamwezi (kɪ-)	Nyanyɛmbɛ (kɪ-)
		Takama (Garaganza)
		Mweri (kɪ-na-) (or Sʊmbwa)
		Kɔnɔngɔ
NILYAMBA GROUP	**Kɪmbʊ**	-
	βʊngʊ	-
	Nilyamba	-
	Rɪmi (kɪ-ɾɪmi)	-
	Langi (kɪ-)	-
	?Mbugwe	-

2.1.4.3 Guthrie I

Guthrie (1967:5, 6) was careful enough in advancing his caveat from the outset that the aim of his monograph was two-fold, (a) to establish some framework for future reference in identifying and classifying Bantu languages, (b) to throw into prominence the places where knowledge of a language is fragmentary or even non-existent. In addition, he stated categorically that his work was essentially tentative, and that some well-informed person might find some groupings quite unjustified (Guthrie:ibid).

Borrowing from Doke, Guthrie (1948:73) made a distinction between language *groups* and language *zones* whereby a *group* was a unit with a purely linguistic significance, whereas the *zone* was mainly geographical. This implies that *zones* refer to language taxonomy based on geographical contiguity or proximity rather than on genetic affiliation. That is a very important distinction to make especially in Bantu languages which are essentially all similar, except when distance and other factors like contact with other groups make them less similar. The work of Guthrie forms the major point of departure and will be quoted at some length to provide the background of the concept of Zone F which permeates this study. The following are the methods he used to arrive at his conclusions.

In grouping the Bantu languages, Guthrie suggested two methods of classification, the historical and the empirical. He dismissed the historical as impossible to apply in the African context because there was 'no historical records', so we may hypothesize that by 'historical' perhaps he only meant 'written' records, thus assuming that history and the writing tradition

are synonymous, and that without writing, history is impossible (Guthrie:ibid), something which is unfortunately not true.

His empirical method included drawing isoglosses on a map to show the distribution of linguistic features. These are lexical, grammatical, phonological, phonetic and tonal (Guthrie, ibid). He identified the criteria for isolating languages as Bantu, dividing them into two groups, one based on principal criteria, which he said were straightforward to apply, and a second based on subsidiary criteria, which were less easy to apply because a language's forms change so much by contraction and attrition. For the principal criteria, he isolated two, grammatical and lexical. The subsidiary criteria included firstly, roots, 'invariable cores' or 'radicals' from which most of the words are formed by agglutination, and secondly, a balanced vowel system in the radicals (roots) consisting of one open vowel /a/ with an equal number of back and front vowels.

The relevant criteria for this study are lexical and phonological. However, the lexical part is less relevant for the purposes of this study since Guthrie's concern was retention in the daughter languages rather than innovation. Retention would be handled by lexicostatistics, a method which was used by others, as described in *2.2.4.6* and *2.2.4.7* below in the discussion of Nurse and Philippson (1980a) and Nurse (1999).

In classifying Zone F, Guthrie (1967:46) admits that it is not a unique zone, because many of the features are not peculiar to it. He goes on to enumerate the distribution of some 17

characteristics which he views as the most important when they are taken together, although they are neither unique to nor distributed evenly in all Zone F languages, some not found in some languages. The list of these differentia contains mainly grammatical features, an area beyond the scope of this work.

The relevant phonological differentia include the following, as set out in *Table 2.5* (Guthrie 1948:23, 1967:46-47). Some are either common to other Bantu languages, are not found in Zone F or are simply obscure. For example, the alternations of *ɪ e* and *ʊ o* in suffixes are not distinctive in some languages, while they are different phonemes in other languages.

Table 2.5 Phonological differentia defining Zone F?

Feature	*In Zone F, found in*
Distinction between i and ɪ, and u and ʊ	All except F10, F23, F34
Long/short vowels	All
Every language is 7V	All except F10, F23, F34
Unusual alternance l/ɽ/ʁ	F32
k/c, l/r, d/l alternations	Mixed picture, like other zones

To classify these Bantu languages into finer groups of similar featured languages, Guthrie (1967:27, 28) suggests two possibilities:

(a) Classification by fragmentation, starting with the whole of Bantu and then subdividing it into sections of closely related regions until the smallest indivisible, useful unit is reached. This however was the technique attempted earlier and did not yield good results.

(b) Classification by taking one individual language as a core, starting point, then grouping

all those languages adjacent to the core language displaying similar characteristics. According to Guthrie, these characteristics are selected for practical reasons rather than taking all possible features to be shared by the languages in one zone. A wider selection of features will imply the inclusion of fewer languages, while a few shared features will admit more languages into a zone. This means that in some members of the group an important feature may be missing. This method modifies his empirical method involving use of what he calls the practical method. The arbitrariness of the features selected is an essential modifying technique to his empirical method, a method that he used to classify all the Bantu languages into 16 zones: A, B, C, D, E, F, G, H, K, L M, N, P, R, and S, where D and E were later reconfigured by other scholars to obtain Zone J distributed into DJ and EJ. By zone, Guthrie (1967:28) therefore meant, 'primarily a set of groups which have a certain geographical contiguity and which display a number of common linguistic features as well'.

Such a process is contradictory in one sense. At the beginning, Guthrie said zones are not linguistic. When he implemented the procedure, zones became geographical and linguistic entities at the same time because zoning was based on linguistic criteria rather than defining areas arbitrarily for purely geographical convenience. And it is for this change of procedure for which Guthrie is criticized, because he did not follow through his excellent caveat quoted above. To avoid this error, Guthrie would surely have admitted that some geographical overlap in the distribution of speech communities is a regular and sometimes necessary correlation between people and territory.

As a major linguistically based classification then, Guthrie's attempt marked the beginning of well-grounded work, since some of these zones are linguistically valid. The members of Zone F in this scheme were those shown in *Table 2.6.* This early classification did not include any F31, F32, F33 and F34. In the SSN group, all the dialects belonged to F22, while F21 stood alone as a mono-dialectal entity.

Table 2.6. Evolution of linguistic classification in Zone F: Guthrie I (1948)

Major Classification	Language or cluster	Dialects
Zone F	**Tongwe F.10**	Tongwe F.11 Bende F.12
	Sukuma (kɪ-) F.21	-
	Nyamwesi (kɪ-) F.22	Nyanyembe F.22 Takama F.22 Mweri F.22 (Sɑmbwa) Kɪya
	Sɑmbwa (kɪ-) F.23	-
	Kɪmbɑ (kɪ-) F.24	-
	βɑngɑ (ɪkɪ-) F.25	-

A major criticism of questionable classification can be levelled against Guthrie's finer classification in SSN. If "Sukuma", "Takama", "Kiya", and "Mweri" all refer to the four cardinal points, North, South, East and West respectively, how can Guthrie's Nyamwezi include all the cardinal points as its dialects and exclude one, Sukuma 'north' as a separate language?

In addition, how can Mweri (or (kɪ-) Sʊmbwa (in F22)) be different from (kɪ-) Sʊmbwa F23?

This might have been a problem of relying on informants' responses without cross-checking to be certain what they meant by the labels they used. To say that "so-and-so is eastern, western, northern, or southern", does not automatically mean that they belong to the same genetic language. It may simply mean "people living there, the others", regardless of linguistic, ethnic, cultural or biological affiliations. For instance, it is common for F21b speech communities to call all those on their west "βànàŋwèèlì" which simply means, "people who are on our west". These western people include every speech community to their west, including some F21a, F23 and EJ23 (RuZinza) speakers. The F21 speakers regard all people to their south as 'βàDàkámà, without any specific reference to linguistic affiliations. It is such situations of self-reporting by the informants which might have swelled the number of languages and made the distinction between "language" and "dialect" even more difficult when these artificially created identities, the 'tribes' took root. As many have commented, some languages appear to be dialects of one language linguistically, although regarded as separate languages when broader social identities are referred to, especially when outsiders had to label communities, as happened in colonial situations or when African societies named their neighbours according to their perceptions and points of view rather than according to the facts at hand.

2.1.4.4 Guthrie II

The classification shown in *Table 2.7* is a revised version of Guthrie's 1948 scheme, and it shows some alterations, like the introduction of F31, F32, F33 and F34.

However, the dialects of F21 and F22 remain the same, while the status of Mweri (F22d) and Sʊmbwa (kɪ-) (F23) continues to be ambiguous as to whether Mweri was the same as in the 1948 classification, belonging to both F22 and F23, or it was different. As many others have observed, the subsequent researchers have not taken Guthrie's caveat into account and they have continued to regard Mweri (F22d) and Sumbwa (F23) as separate and the same entity at the same time, hence being caught in a dilemma of whether to view F23 as a dialect of F22, of F21 or as an autonomous language. Part of the problem is Guthrie's violation of his own caveat by promising to use geographical criteria and ending up employing linguistic ones. Kahigi (1988:2,3) traces this ambiguity of classification to Dahl (1915:xii) and Bryan (1959:119). However, it is the case that Bryan (1959:119) does not mention Sumbwa at all, but rather she foot-notes her source of information that it was supplied by Chief Lugusha of Tabora who mentioned to her that (ki)Nyamwezi had 4 dialects, (ki)Nyanyɛmbɛ, Takama, (ki-na-)Mweri, and Kɔnɔngɔ. Where she does mention Sumbwa, it is in connection with the classification by Guthrie in which she was only a compiler, and which she labels MG3. Quoting Guthrie, she records one dialect of (ki)Nyamwezi as "*Mweri F.22 0, other names Sumbwa*" where "*M(;3*" refers to Guthrie's revised classified list of Bantu languages manuscript, then (1959), while the "*0*" refers to a language about which Guthrie did not have first-hand knowledge. Such languages of which he had second hand knowledge include Mweri (Sumbwa, the dialect), Takama (also called Garaganza) and Kɪya (Bryan 1959:ix (acknowledgements and explanatory notes), 119).

This revised list of languages included dialects for which Guthrie himself had only second-

hand information, supplied by some speakers of SSN who gave their native speaker intuitions with all their other socio-cultural perceptions, biases, attitudes of and affiliations to the other surrounding speech communities, etc. Such attitudes and perceptions dividing F22 dialects did not necessarily coincide with purely linguistic classification within SSN.

The SSN classification, therefore, while trying to be as linguistically based as possible, was also largely areal. It took into account the possible geographical spread and proximity of the Bantu languages, just as Guthrie (1962b:5) himself notes, and Dalby (1970:162) and Nurse (1979:43) observe about the role of proximity. The members of Zone F were thus more or less fixed at 11 major language groups, as shown in *Tables 2.7* and *2.8*, although that was not meant to be the final classification by Guthrie.

Table 2.7. Evolution of linguistic classification in Zone F: Guthrie II (1967)

Major Classification	Language or cluster	Dialects
Zone F	**Group 10**	
	F.10 Tongwe	F.11 **Tongwe, kɪ-**
		F.12 Bende
	Group 20	
	F.21 Sukuma, kɪ-	-
	F.22 Nyamwesi, kɪ-	F.22a Nyanyembe kɪ-
		F.22b Takama
		F.22c Kɪya
		F.22d Mweri
		-
	F.23 Sɑmbwa, kɪ-	-
	F.24 Kɪmbɑ, kɪ-	-
	F.25 βɑngɑ, ɪkɪ-	
	Group 30	-
	F.31 Nilamba, ɪkɪ- (Ilamba)	-
	F.32 Rɪmi, kɪ- (Nyatɑrɑ)	-
		-

2.1.4.5 Guthrie III

The final stage in the classification of Bantu languages, and Zone F and SSN in particular by Guthrie saw some discernible stages of development in Bantu classification (*Table 2.8*) Modifications are introduced as perceptions change significantly, while other alterations undertaken are only minor where the linguistic groups remain essentially the same. This implies that the eleven members of the Zone spring from the same node of the tree, using the tree-model metaphor, because of the linguistic criteria used.

2.1.4.6 Nurse and Philippson

Among others, Nurse and Philippson (1980a, 1980b) are sceptical about the unity of Zone F, as introduced in **2.2.3** above. Using the lexicostatistical method, they divide the Zone into two parts, West Tanzania and Langi. In their scheme, Langi is composed of Langi itself and Mbugwe. They separate Langi and Mbugwe from the rest of West Tanzania because the connection is mainly lexical, whereas syntactically, Langi/Mbugwe resemble the Ruvu languages. West Tanzania is further sub-divided into two, SSN and Nilyamba/Nyaturu/Kimbu, as illustrated in *Table 2.9.* below.

Table 2.8. Evolution of linguistic classification in Zone F: Guthrie III (1970)

Major Classification	Language or cluster	Dialects
Zone F	**Group 10**	
	F.11 Tongwe	-
	F.12 Bende	-
	Group 20	
	F.21 Sukuma, kɪ-	-
	F.22 Nyamwesi, kɪ-	-
	F.23 Sɔmbwa, kɪ-	-
	F.24 Kɪmbɔ, kɪ-	-
	F.25 βɔngɔ, ɪkɪ-	-
	Group 30	
	F.31 Nilamba, ɪkɪ- (Ilamba)	-
	F.32 Rɪmi, kɪ- (Nyatɔrɔ)	-
	F.33 Langi, kɪ- (Irangi)	-
	F.34 Mbɔgwe	-

Table 2.9. Evolution of linguistic classification in Zone F: Nurse & Philippson (1980a)

Major Classification	Language or cluster	Dialects
WEST TANZANIA/LANGI	**A. West Tanzania**	
	1. SSN	Sumbwa Sukuma Nyamwezi
	2a. NNK	Nyaturu Nilyamba Isanzu Nyambi
	2b Kimbu	Kimbu
	B. Langi	Langi Mbugwe

Furthermore, Kimbu is separated from Nilyamba/Nyaturu because of having some influences from West Ruvu languages.

The major criticism regarding this division is that Sumbwa and Kimbu, and indeed Langi and Mbugwe, cannot be set apart from the rest of Zone F simply because they have been influenced by their neighbours. Another more important point of contention with this division is that the authors did not have enough data for some of the members, notably Mbugwe and Kimbu (Nurse & Philippson 1980a:47-8), in addition to the fact that they did not include Tongwe, Bende and βungu without any strong justification apart from the fact that they did not have data for those languages[x]. A third objection is the raised status of Isanzu and Nyambi as coordinate with Nilyamba and Nyaturu. *Table 2.9* gives the impression that all the possibilities were explored and that the languages shown represent the complete and accurate configuration of Zone F, including their internal hierarchies.

2.1.4.7 Nurse

The classification of Zone F by Nurse (1999) while not significantly different from that of Nurse and Philippson (1980a), differs substantially in that Nurse suggests not only that Tongwe, Bende, βungu and Sumbwa be excised from Zone F, but also that Langi and Mbugwe be excluded as well (Nurse 1999:10-1). Labroussi (1999:360) shares Nurse's reservations about βungu (Wungu). She describes the language as belonging peripherally to

[x] More data are available now and the situation of 1980 was noted by Nurse (1999) himself almost two decades latter, by including more languages/dialects, thus helping make more concrete statements.

all its neighbours, but differing from them in significant ways so much so that it cannot be grouped with them. She prefers to place it lexicostatistically with the macro Mwika-Nyika group (Zone M) .

The status of SiSuumbwa is questioned because, like KiBende, it has BS and 7 > 5, while the rest have neither. Nurse bases his arguments on a survey of the lexical, phonological and lexicostatistical literature. No definite answer is also given as to where these excised languages/dialects should belong. Since assigning membership of those languages was not the aim of his paper, an answer was not expected, just as it is not our central aim to trace the roots of any group which does not fit in Zone F and place it where it belongs.

What remains of Zone F therefore, is what Nurse (1999:10) calls 'core group of West Tanzania', namely F21/F22 (KISukuma/KINyamweezi), which he calls 'dialects of one language'; F24 (KIKIImbʊ), F31 (KInILaamba); and F32 (KIRImi, or KINyaturu, properly known as KINyaRʊʊ by the native speakers).

One main reason why these other language varieties are excluded by Nurse is that they still lack sufficient information (Nurse and Philippson 1980a:47, Nurse 1999:11).

Table 2.10. Evolution of linguistic classification in Zone F: Nurse (1999)

Major Classification	Language or cluster	Dialects
WEST TANZANIA or TAKAMA or Zone F	**Sukuma/Nyamwezi** ? Sumbwa **Kimbu** **Nilyamba** **Nyaturu**	 - - -
? Tongwe/Bende ? Langi/Mbugwe ? Bungu		- - -

The reason is not strong enough since what is needed is more research first before conclusions are made, although Nurse (1999:10-1) correctly calls for a reexamination of such unknown languages. It is the aim of this study to redress that shortcoming by including all members of Zone F as presented by Guthrie (1967-71), using data to test the suggestions of excision given.

2.1.4.8 Classification in SSN and Zone F: a synthesis

From the foregoing, it is evident that the reexamination and possible reclassification in SSN and Zone F is quite in order. While the work of the pioneers cannot be faulted, this study endeavours to reexamine SSN and Zone F, given the unsatisfactory manner in which the subject has so far been treated, especially in the area of research in undescribed dialects. The earlier studies laid a solid foundation for future scholars and students of Bantu. But the majority have also continued using the schemes of Bantu classification without questioning whether those languages were indeed mono-dialectal or not, and whether adding undescribed dialect(s) would make any significant difference. This issue of unquestioning acceptance of

Guthrie's contribution is also raised by Nurse (1999:10) in reference to Zone F having historical validity. With this inquiry it is felt that some languages are not members of Zone F and should be removed. However, data for some of them were totally missing and reconciling the different observations made is possible only by using the comparative method and lexicostatistics in addition to phonological criteria based on comparable data for all dialects.

A minor issue concerns orthography. Each author writes the names of the varieties according to his/her perception and competence in phonology and graphemics rather than how the natives of that community understand the names. These names which depart from the conventions used in this study are quoted as they appear in those works. This unsystematic representation is unfortunate. For instance, as an extreme case, most of the Zone F languages have no 'r' in their phonological inventories, but it appears in *Ciaraganza*. Most Zone F languages have a 7-vowel system with a short-long vowel contrast, but many of the scholars do not show vowel length in their writings nor the 7 vowels. All the languages in the zone are also tonal, but the tones are not always shown partly because of the excuse that it is difficult to mark them and the context can always disambiguate words. It is this problem of misrepresentation which creates some of the problems of phonological analysis. In addition, the received nomenclature from the earlier times has not been modified to match the expansion of knowledge. This contributes to the indeterminate number of Bantu languages, since what some of the names refer to are non-existent entities while others are simply misleading. Take for instance the concepts of directional names such as *dùkàmǎ*,

'south', also written as *Takama* to refer to entities which are not linguistic. It is one of the lesser aims of this study to clarify such issues where possible.

2.1.5. Historical interpretation in SSN and Zone F

The role of linguistic studies in understanding history and culture cannot be overemphasized, as Dickens (1995:32-3) correctly observes and Wilmsen (1995) and Barnard (1995) agree when referring to the same subject:

> It is perhaps unfortunate, but it is certainly true, that a good knowledge of the target language cannot be achieved without at least the ability to perceive (and articulate) its phonological contrasts and the ability to classify its morphemes grammatically. Of course, if one is to make historical inferences about a culture from its language, then a background of how languages change over time is also necessary.

For instance, Abrahams (1967b:1) comments that, although F23 is located within F22 administratively and is treated in the literature as if it belonged there, it had a cultural affinity with western neighbours like the βaha (DJ66). In the map of Unyamwezi, Abrahams excludes the βaSuumbwa. By 'cultural affinity' he might have meant 'linguistic affinity' as well, which is attested by our preliminary findings.

Historical interpretation in SSN and Zone F therefore suggests taking into account all pieces and bits of information like that anthropological work by Abrahams. Such works go a long way in filling the gaps or resolving contradictions which linguistics alone might not handle. For instance, there are few words within Zone F which are also found in N10, Tanzanian Ciŋgoni. The Waŋgoni's migratory history from southern Africa is recent in areas like Lake

Nyasa where the Waŋgoni entered.

But significantly, the Lake Nyasa (Malawi) area into which the Waŋgoni entered, was also famous as a source of slaves by slaving expeditions to and from the Indian Ocean coast during the1860s to the 1880s. Slave narratives are normally common with people who have first hand experience of slavery within their clans, even after many generations have passed. During a recent survey in the area, many people did not remember anything about the slave trade. They remembered the Waŋgoni warriors only (Mihanjo, Mapunda and Luanda 1999). Such communal loss of memory seems to suggest two things (a) oral history of such places would not reveal the past if the first inhabitants emigrated and completely new ones occupied their areas, with no one to tell any story. This is an unlikely explanation, because some people survived and remained within the area (Mihanjo, Mapunda and Luanda 1999:3); (b) because the experiences of slavery are associated with the shame of defeat and humiliation, the people would conceal that part of history, although archival sources confirm the presence of slavery up to 1895 (Mihanjo, Mapunda and Luanda 1999:3). The absence of story tellers does not mean the absence of events, and hence absence of history in the area.

When there are knowledge gaps like this slave trade case, especially in relation to Bantu, Zone F and SSN, any source might shed new light. Works in ethnobotany, folk history, oral traditions, or myths should not be dismissed. For example, the contributions by Musso (1968), Chubwa (1979), Mabala (1988), Kairanya (1990), Mdachi (1991), Mkirya (1991), Abdallah (1991), among others, are welcome. They deal with records of oral traditions

elicited from communities the authors know well, supplemented by a few external sources. Such contributions should be complementary rather than be dismissed out of hand before complete evidence is gathered and compared with them. The usefulness of myths, oral traditions and folk histories is corroborated by Schmidt (1978:273), who, working in Buhaya, Kagera Region, excavated prehistoric artefacts from sites mentioned in oral traditions only. The correlation between oral tradition and archaeological find were one-to-one. Such inclusion also takes care of the pitfalls of interpretation, which are normally influenced greatly by the theoretical framework one chooses to use to formulate a research problem, gather data, analyse it and integrate the results with known knowledge.

2.2 CONCEPTUAL FRAMEWORK

This study analyses both quantitative and qualitative evidence in tracing the linguistic history of SSN within Zone F. The evidence comes from phonological and lexical features shared by the target languages. Because of this scope, the family tree model fits the comparative method and lexicostatistics as methods of subgrouping, while the contact models of language development are reflected well by qualitative analyses of vocabulary, especially areal features and loanwords. The comparative method is essentially qualitative and lexicostatistics is quantitative. Indo-European philology gave birth to the comparative method, especially with the work of Schleicher and Grimm (Meinhof 1932:19-21). The method or its close version was later introduced in Bantu studies. Later, lexicostatistics was added to deal with matters of statistical measures and chronology, in addition to the role of sub-grouping. These two methods or reactions against them and their evolution gave rise to all the major models

of language development, namely, the tree, wave, and contact approaches. In this study the family tree and contact models are used.

The wave model is not used, although it handles overlapping features in cases of mixed languages, pidgins or creoles. The model was meant to address the questions raised by the tree model . It views innovations as originating from one source, in one language or dialect, and then they radiate in all directions like a pebble thrown into a pond of water, creating ripples which travel afar, but weaken as they move away from the source. Different innovations may start from different sources and criss-cross at language and dialect boundaries, making some varieties share features with others, which can be traced as isoglosses. A tree model would not show that overlap (Anttila 1972).

The wave model, while it accounts for convergence in language development, is not compatible with the comparative method. Its power rests in accounting for contact.

Significantly, the two models, family tree and contact, correlate well with shifts of paradigm[9] in archaeology and history over the decades as the perceptions of phenomena shifted due to improved horizons in the development of knowledge generally. The major paradigms have been migrationist, processual, and contextual, in that order, although not in a one-to-one relationship with the models (for a full discussion of these paradigms, see

---

[9] Paradigm in this sense is borrowed from Kuhn (1970) from his seminal work in the philosophy of science. It refers to a set of models, concepts, theories, methodologies and methods used by a scientific community in describing and explaining phenomena.

Chami 1994, Trigger 1994, Renfrew and Bahn 1996, Härke 1998). It is worth mentioning here that paradigm shift does not mean complete rejection of earlier paradigms. It only means that new approaches emerge to challenge the old, with each approach having adherents because of its merits, so that parallel paradigms can co-exist and compete, creating different schools of thought in the larger scientific community.

Since these approaches in archaeology and history have had a great impact on linguistics, a brief description is in order because they influence greatly the way our data is described and interpreted historically.

Some scholars working or having an interest in linguistics have also been working or interested in archaeology, history, anthropology, philosophy, and ethnology, among many disciplines, and the methods from those other disciplines have found their way into and influenced linguistic thinking in important ways. The approaches are not mutually exclusive nor monolithic, but rather they complement each other as they attempt to explain historical events from different angles. In addition, each paradigm or model best handles one type of data than another. For instance, the family tree model works well with lexicostatistics and the comparative method because these two assume monogeny.

The contact models which emerged with the development of sociolinguistics are suited for analysing qualitative data in phonology, syntax, semantics, morphology or lexis, in examining areal features and/or loans. In the contact models, lexical distribution is explained in terms

of the interaction of contiguous speech communities and the potential for one-way or mutual influence. The situation that obtains in SSN and Zone F is that captured by Thomason and Kaufman (1988:35-95) about changes occurring in languages without any shift. Since changes are relative, depending on many dependent variables, they may include borrowing vocabulary, new sounds, derivational affixes, phonological features, inflectional affixes followed by major structural features. The cases of BS and DL processes within SSN and Zone F generally, for instance, can be explained in these terms where some core members appear to originate the process, and other adjacent languages borrow words. By borrowing lexical items, they introduce BS- or DL-like processes in their systems. These processes tend to be unproductive in their new environment because they are difficult to adapt fully. The tendency of borrowing is greater when the power relations between languages in contact are asymmetrical; the period of contact is long; their numerical strengths differ; and the typological fit is closer. In the case of Bantu speakers, asymmetrical power, for instance, may be medicine related to the supernatural, specialized knowledge in animal husbandry, as in the case of borrowing colour terms of cattle from Southern Cushitic by Zone F communities.

The migration and diffusion paradigm, though heavily criticized for its ethnomorphic[10] leaning, especially in the past, has some important relevance in our study, since synchronic movements of some KISukuma (F21) speakers supports that possibility. Starting from the

[10] The fallacy of ethnomorphism refers to the conceptualization of the attributes of other groups in terms of one's own (Fischer 1972:224-226), which differs from ethnocentrism which refers to the exaggeration of the role of one's group in the interaction with other groups (Fischer 1972:226-230).

early 1970s, when there was a great drought in the region, some communities of βaSukuma moved and settled in Morogoro, Mbeya, Iringa and Rukwa regions[11]. They were refused the permission to cross into Zambia with their herds of cattle because of the new political boundaries, which the βaSukuma did not recognize. Wherever they settled, these migrant communities were large enough to continue using KISukuma amongst themselves, as they continued to keep in touch with the larger KISukuma communities they had left behind. Three decades on, they began to intermarry with the communities they had found, resulting in mutual borrowing of some lexical items. Contrary to the military and conquest model of migration explained below, these KISukuma migrants have tended to blend well in their new settlements, with only minor skirmishes between them and the predominantly agricultural communities they found. Since they both keep cattle and cultivate cash and food crops, they solve their problems without resorting to war. This state of affairs might have existed even in the past where the resources were likely to be even more abundant.

Migrationist (also known as traditional, evolutionary or diffusionist) archaeology is an approach with a tendency to explain cultural change, different phenomenon or similarity of material culture of one society as an adoption from foreigners, neighbours or trading partners[12]. For instance, where "Hamitic" languages were not spoken, it was argued that the "Hamitic" overlords had adopted the languages of the conquered Bantu and that their own

---

[11] For some more discussion on βaSukuma recent migrations, see Masele (1996).

[12] For a comprehensive summary and review of these paradigms in archaeology, see Chami (1994), Fagan et al (1996), Renfrew and Bahn (1996), Härke (1998).

speech had disappeared without trace (Trigger 1994:328)[13]. In archaeology, the ruins of Zimbabwe were thought to have been the work of civilized foreigners from the north, the Phoenicians of the Middle East, rather than the work of the Shona themselves because of the spectacular structures found there (Renfrew and Bahn 1996:443-4). The migrationist paradigm was an approach common to archaeologists who were trained in classics and history. While diffusion does not necessarily imply movement or replacement of peoples, migration implies precisely that. Migrations have indeed existed from time immemorial. Even in Bantu studies, it is often assumed that the Bantu migrated from parts of western Africa and expanded to central and southern Africa because of iron technology and the superiority it conferred on them to conquer other communities.

For instance, Hock (1991:467-70), gives an account of migrations, taking some Indo European languages as his point of departure, elaborating on the theory by Dyen (1956). According to this idea, migrations as massive movements of people from one place to another are a common phenomenon throughout human history. Speech communities migrate to new territories where they find native people with their own different languages, resulting in at least four effects.

---

[13] The case of ethnicity in Rwanda and Burundi is intriguing. The Batuutsi are thought to be Nilotic or Afro-Asiatic from the north, possibly Ethiopia, although there is no evidence whatsoever so far because they speak KiNyarwanda, iGiHa or KiRundi, which are Bantu languages. In these languages, there are also no known traces of foreign linguistic or cultural influences, Nilotic or Afroasiatic. This would only suggest that there was ethnocide which left no trace (see Kimenyi 1979:1 who suggests that the Batuutsi and Batwa lost their languages and adopted that of the Bahutu, a Bantu majority group).

First, if a migrating speech community finds no native linguistic competitor in the new area, the possibilities of dialect/language expansion are limitless as the native dialects/languages are replaced by those of the immigrants. With time, variation emerges as speakers spread in their new territory. Where there is no prehistoric evidence, such dialectal spread is suggestive of migration from an original homeland. In the area under study, linguists and historians alike suggest that the Bantu groups migrated and spread into the area and became dominant both culturally and economically (Batibo 1992b:47).

Secondly, migrating speech communities tend to have smaller linguistic diversity than those left behind as the speakers in the new environment are forced to forget their differences in order to survive. For instance, English in the Americas or Australia shows less heterogeneity than English in Great Britain where the dialectal variations are enormous. In this regard, homogeneity of several Bantu varieties in one location is suggestive of immigration. This hypothesis is difficult to accept as universally true since homogeneity is brought about by factors other than immigration alone. For instance, in societies like the United States, class distinction is based on property, colour, race, or geographical origin of immigrants. In this situation, regular contact between speakers of one variety of a language like English is discouraged. As a result, each class of people evolves or maintains their own peculiar form of English, as is the case of Ebonics for the majority of Americans of African origin.

Thirdly, decreased contact between the homeland and the emigrants in their new home results in innovations in the homeland which fail to reach the emigrants in their entirety, or fail to

reach them completely.

Lastly, a complete separation with the homeland may ultimately result in the appearance of new, different languages. In the absence of written documents, only traces of linguistic features may constitute proof that the migrant groups did indeed originate in a certain area. Schmidt (1978:287-97) and Chami (1999), among others, doubt the migratory explanation for Bantu extension, since archaeological studies find no evidence. The migration explanation is also highly speculative because it is treated as a fact instead of being a hypothesis only. Chami (1999:205-9) points out that the trade explanation linking East Africa and the Graeco-Roman world in antiquity might explain some of the rapid spread of material culture in East Africa rather than migrations of people. The spread of iron, for example, started in the Lacustrine region of East Africa rather than West Africa where the Bantu are thought to have originated. In Africa, as elsewhere, military superiority in prehistoric times might have been irrelevant, because it is only one source of power.

As a challenge to traditional archaeology, processual (or new, behavioural) archaeology refers to the dynamic relationship between socio-economic aspects of culture and the environment as determinants of cultural processes and change. It was a reaction against conceptions of the world based on culture history as practised by historians trained in classics and history. This alternative paradigm aimed at placing credit where it was due, rather than attributing change and innovation predominantly to invaders or conquerors (Itandala 1979:148; 1983:43-4; Chami 1994:19). In the case of the Bahutu and Batuutsi cited above,

the "Hamitic/Cushitic myth" remains a myth, since there is no evidence to substantiate that the Batuutsi who are thought to be probably Nilotic or Afro-Asian indeed lost their language without trace[14].

It was from the backdrop of such paradigms that the family tree model of language development evolved. It was an analogy from the evolutionary nature of biological organisms which start from one source and expand into new territories. Because the migratory paradigm is not dead, and sometimes migrations do indeed take place as explained by Hock (1992), it is important to mention the models used in this study since they are inevitably influenced by the migrationist paradigm.

2.2.1 The Models of language development

2.2.1.1 Family Tree model

As the name suggests, the family tree model, spurred by the theory of biological evolution of various species from one source, compares languages starting from a parent who gives birth to daughters who in turn give birth to children, in an endless cycle of change (See Vansina 1995 and Nurse 1997 for an overview of this model and others). Related dialects are considered to be co-ordinate, at the base of an inverted tree, from where their ancestor is

[14] The role of blood type and DNA analyses are unlikely to solve this problem since it is difficult to know if there exists any correlation between blood or DNA and language in the first place, although an open mind to entertain that possibility is better than out of hand dismissal.

posited as uniting them into a single node, forming their proto-language. That proto-language is itself considered to have had relatives at another co-ordinate level who were united to form another node higher up the hierarchy, forming yet another proto-language. The process is repeated until one super-ancestor is reached from which all the language varieties descended. The form of the tree resembles a tree trunk, with the dialects forming its finer branches.

The model, and hence the comparative method and lexicostatistics, assumes monogeny, with an inherent tendency to exclude all other words from a comparative series, because the aim is cognation only. The linguistic tree is assumed to have only one root which gives rise to many daughter languages. Existing speech communities however show that a language may arise out of many sources, as in the extreme cases of pidgins, creoles, and mixed languages like Tok Pisin, Ma'a (Thomason and Kaufman 1988). This indicates that proto languages should be thought of as having dialects, as in Proto Indo-European (PIE) 'warm' from *gwerm- ~ θermós ''warm, hot' in Greek and PIE *gworm- ~ fornus 'oven' in Latin.

On the other hand, the criticisms are not fully justified because the aim of the tree model and its parent source, the comparative method, is the tracing of genetic relationships between languages rather than to find all the sources from which languages drew their resources. It is against this background of unexaggerated function that the model is used in our study. It is not an absolute or perfect model for a one-to-one relationship between historical event and its representation. Rather, it is only one way of representing reality in a simplified way, needing other tools and external sources to arrive at a historical interpretation.

2.2.1.2 The Contact models

The contact models are explained in detail by Thomason and Kaufman (1988). They view similarity between languages as a range of possibilities, one being genetic affiliation, and the other contact. Languages can be similar because the speakers have been adjacent for a long time, interacting and borrowing from each other.

In the area under investigation, groups like the Sandawe and Hatsa (also Hadza) of the Khoisan family are found, and they have been living there for an unknown number of centuries. As Ehret (1984:489) suggests with regard to the SSN speakers, the Hatsa and the Sandawe might have been earlier settlers in the area. They have remained without being assimilated by the immigrants by maintaining their way of life for the most part. However, who settled there first is a matter of relative chronology since Proto-KISukuma-KINyamweezi seems to have originated within the general area of βUSukuma (Ehret:ibid). Posnansky (1981:533) also comments on this problem of dating, that, although the dates obtained by the Carbon 14 (C^{14}) method are relatively accurate, "the variability for the period under review may range over several centuries". Linguistic evidence gives some clues to the interactions between Bantu groups and others, as the following JinaKIIya words compare with those from Sandawe, taken from Newman (1970).

(3)

JinaKIIya (Bantu)	Sandawe (Khoisan)	Gloss
mbùùshi	*bús'*	(Wildebeest) gnu
ndòólò	*dóró*	Burchell's zebra
mòógà	*mògà*	*Amaranthus graecizans* (plant, green vegetable)

From such shared vocabulary, more hypotheses can be advanced. As the lexical items show, either group might have borrowed from the other, that is, Khoisan Sandawe borrowing from Bantu JinaKIIya, and vice versa, showing a contact situation. The direction of borrowing can only be ascertained by comparing a large corpus of lexical items from the pair of languages in relation to the vocabulary of the other members of the varieties in contact. Vocabulary items representing tangible objects like working tools, utensils and ornaments are one of the easiest to borrow and diffuse from culture to culture (Anttila 1972:155). Within one group of languages, lexical diffusion from external sources results in lexical variation, double or irregular reflexes. It also results in dialect mixing. Dialect mixing is common in SSN.

When dialect mixing (or 'koineization') is between related languages, detection of loans is almost impossible without the help of marked features from one of the dialects in contact. It is also impossible to detect loans if the source language ceases to use a word, while the recipients continue using it. In (3), it may be the case that the Sandawe were assimilated, although they retained some words which then spread to the rest of the JinaKIIya immigrants. On the other hand, the Sandawe speakers might have borrowed from JinaKIIya some of the names for animals and plants. The evidence of this would come from other KISukuma or Bantu dialects. If they had the same words, then Sandawe would have borrowed them.

2.2.1.3 Theories and models: Dynamism in SSN and Zone F

SSN and Zone F communities in general have been very dynamic, with many movements of people characterizing the area. There have been internecine wars, famines, search for agricultural and pasture land, and slave raids. In prehistoric times, such movements might have been numerous. Recent history around the Great Lakes area calls to mind the movements of people from various places to sheltered enclaves either in mountainous areas or in plains where enemies could be seen from a distance. SSN speech communities could have taken shelter in those areas which were not slave routes nor reservoirs of slaves. That may partly explain the extent of SSN's mixed status, as people from diverse groups who have entered the area and conformed with the people they found in order to survive[15].

Current research in historical linguistics promises and professes dynamism in intent, but fails to reach that dynamism in practice. Language communities continue to be cast in rigid geographical areas as shown in *Map 1.3* which draws boundaries as if they are immutable enclaves enclosing ethnic communities. While locating linguistic communities without borders seems to promise capturing the identity of the fluid nature of speech communities and languages, the analyses lag behind and continue locating language varieties as rigid, isolated entities. Cases in point are the SiSuumbwa, KeeMbuwe, KiiRaŋgi, ɪCɪWʊʊŋgʊ and

---

[15] Mihanjo, Mapunda and Luanda (1999) discuss such a scenario of areas of refuge where the Waʃ]goni marauders are remembered more for their invasions than the slave raids, suggesting that those people might not have witnessed the slave raids because they ran away northward into the area currently occupied by the SSN speech communities. These came from different speech communities. The result was mixed features in the SSN languages.

KiBende/KiTongwe varieties which display that dynamism in their phonology and vocabulary as they interact and are influenced, so much so that many scholars treat them with suspicion when they are grouped in Zone F. It is within the aims of this study to examine their status in Zone F and SSN vis-á-vis their dynamism, and whether their exclusion is indicative of separate paths of historical development or contact only. While the family tree model shows relationships between languages/dialects, it is the contact model which promises a better interpretation in Bantu scholarship. The model treats languages as entities in perpetual motion, their dynamism shown by their maintenance, shift, or death, while others 'commit suicide or are murdered' (McMahon 1994:284-305)

2.3. CONCLUSION

This literature review surveyed what has been done in description, classification, and historical interpretation in SSN and Zone F. The weaknesses identified include gaps in the description, classification and interpretation of the available linguistic data. Thus, the following are areas of focus in this study: description of the historical development of SSN and Zone F with reference to BS, 7 > 5, DL, glottalization, voiceless nasal formation and vocabulary in order to give a new interpretation and improved classification.

CHAPTER THREE

PHONOLOGICAL DEVELOPMENT

3.0 INTRODUCTION

The Proto-Bantu phonological inventory is composed of the following reconstructed consonant phonemes: / ***p, *b, *t, *d, *c, *j, *k, *g, *m, *n, *ny**[1]**, *ŋ, *y** /. It also includes the pre-nasalized consonants /*mp, *mb, *nt, *nd, *ɲj, *ɲc, *ŋk, ŋg/. The focus of this study is the eight non-nasal phonemes /*p, *t, *k, *b, *d *g, *c , *j/ in relation to three major phenomena: vowel systems, especially reduction of 7 vowel system to 5 vowels (7 > 5); Bantu Spirantization (BS), especially as related to 7 > 5; and Dahl's Law, one the one hand, and glottalization and voiceless nasal formation on the other. The study of the eight target sounds shows those phonological developments more clearly than others like nasals.

One issue which needs elucidation is the status of *d and the /d/ and /l/ reflexes in synchronic Bantu phonological inventories. Dealing with the stops versus continuants controversy, Kahigi (1987, 1988, 1995) also addresses the choice between /d/ and /l/ in reconstructions[2].

---

[1] The representation given by Guthrie (1967-71) *ny, is IPA *ɲ. Some of the other conventions used by Guthrie are *y, which is IPA *j. The plosive *j which is also adopted in this study, is IPA *ɟ.

[2] For a full discussion of this, see Kahigi (1988) who offers good arguments for both sides of *d and *l preferences. Kahigi favours the diachronic development of stop weakening by Homburger and Guthrie's PB *d > l rather than Meinhof's strengthening rule of *l > d (Kahigi 1988:31, 150). Guthrie's solution is acceptable to Kahigi because it is phonetically and typologically sound, and it is simpler. In contrast, Meinhof's strengthening solution gives

(continued...)

In the reconstructions by Guthrie, /l/ is absent. This assumed absence of *l in Proto Bantu is odd taking into account the synchronic distribution of laterals across Bantu, especially with regard to languages like KIKIImbʊ, which are still like Proto Bantu in their phonological systems. The reflex of *d being /l/ in many languages, including KIKIImbʊ (F24) and KInILaamba (F31) indicates that the Proto Bantu form might have been *l rather than *d. The reconstruction with *d might be relevant in the parent of Proto Bantu. It is odd for KIKIImbʊ and KInILaamba to have almost identical consonants with Proto Bantu, except for one or two phonemes like*d. This /l/ solution in part supports the proposal of positing PB *l by Meinhof (1932) as one important pointer to something amiss with the *d reconstruction. The findings of the UPSID[3] sample of liquids in world languages also lends some solid support for PB *l. Out of a sample of 317 world languages in the UPSID, almost all (95.9%) had at least one liquid, while 72.6% had more than one liquid (Maddieson 1984:73). If this Proto Bantu *l and *d hypothesis is correct, then KISukuma's /d, l/ and KINyamweezi's /l/ are actually inherited reflexes from Proto Bantu. They did not change, just as the sounds like /k/, /p/, /t/, /g/ did not change from Proto Bantu. However, scholars posit PB *d or PB *l, but not both (See the discussion with some data in ***3.1.2.10***, ***3.1.2.11***, 3.1.2.12, *3.2.1.1.7*, *3.2.1.1.8* and *Table 3.28)*.

---

[2](...continued)
reflexes which violate both phonetic and typological plausibility.

[3] UPSID is an abbreviation for the UCLA Phonological Segment Inventory Database.

Since the nasals and vowels are relatively stable in Zone F and have not changed much from Proto-Bantu, only a limited discussion of them is undertaken in the general overview of Zone F in the first part. SiSuumbwa, KISukuma and KINyamweezi are described in detail in the second part while the third is the conclusion.

3.1. GENERAL OVERVIEW OF PHONOLOGICAL CHANGE FROM PB TO THE TARGET ZONE F LANGUAGES

3.1.1. Vowel sytems in Zone F : 7V and 7 > 5

All 7 of the reconstructed PB vowels correspond quite well with Zone F vowel inventories (See *Appendix 2*). The PB vowel system can be represented as:

(4)

FRONT	MID	BACK	
i/ii		u/uu	**Super Close**
ɪ/ɪɪ		ʊ/ʊʊ	**High**
e/ee		o/oo	**Middle**
	a/aa		**Low**

Guthrie (1967-71) represents the vowels as follows: j/jj (i/ii), i/ii (ɪ/ɪɪ), e/ee (e/ee), a/aa (a/aa), o/oo (o/oo), u/uu (ʊ/ʊʊ), ɰ/ɰɰ (u/uu). The convention used in this thesis is in brackets, also shown in (4). The phoneme /e/ is the IPA [ɛ], and /o/ is the IPA [ɔ]. For ease of representation, the convention adopted by Nurse (1979a), Maganga and Schadeberg (1992) and Batibo (2000), among others is followed.

In Zone F, the languages which have retained the 7LS vowels are KɪSukuma, KɪNyamweezi, KɪRɪmi, KɪnɪLaamba, KɪKɪɪmbʊ, KiiRaŋgi, ɪCɪWʊʊŋgʊ and their varieties. Those which have merged or seem to be in the process of merging i/ii and ɪ/ɪɪ into i/ii are mainly SiSuumbwa, KiBende, KeeMbuwe and their varieties. SiSuumbwa, KiBende, KeeMbuwe and their varieties have mainly merged superclose /i/ and /u/ with the high /ɪ/ and /ʊ/ vowels respectively into one quality of high /i/ and /u/, and retained the rest. On the other hand, in KeeMbuwe, /ɪ/ merged with /e/ and /ʊ/ with /o/, giving /e/ and /o/ respectively, as shown in (5)[4].

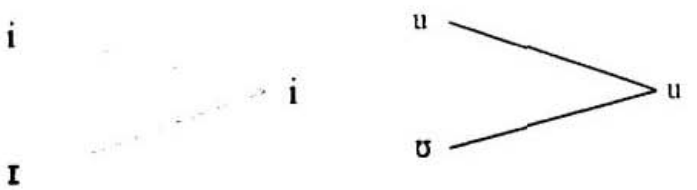
The reduction from 7 vowels is rather surprising, especially taking into account Dempwolff's (1912:15) observation that, KeeMbuwe had 9 vowels, represented as i̱ (y), i̱ (y), e̱, e̱, a, o̱, o̱, u̱ (w), and u̱. This may be explained by the fact that Dempwolff analyzed his data phonetically, not phonologically.

[4] Although our data as shown in *Tables 3.1, 3.2, 3.3, 3.4* and *3.5* demonstrate that KeeMbuwe is 5V, Mous (p.c.) and Nurse (p.c.) think the language has 7 contrastive vowels, while Dempwolff (1912) shows 9. These tables address F10, F23, F25 and F34, since the vowels in F21, F22, F24, F31, F32 and F33 are not controversial.

(5) KeeMbuwe

In SiSiloombo, SiYoombe, KiLooŋgo, and KiBende, /ɪ/ and /ʊ/ were lost phonologically when the superclose and the high vowels merged, as shown in (6), although the high /ɪ/ and /ʊ/ appeared occasionally phonetically. Of the five varieties which have changed from 7V to 5V languages, KiBende and KiLooŋgo are the most consistent. The others like SiSuumbwa borrow words with /ɪ/ and /ʊ/, and appear to be 7V.

(6) SiSiloombo, SiYoombe, KiLooŋgo, and KiBende



This merging of the i/ii and ɪ/ɪɪ[5] vowels to remain with 5LS is normally associated with a process known as Bantu Spirantization (BS) in some eastern Bantu languages. The process is a weakening of a stop whereby it became a fricative in front of the super close vowels /i/ and /u/. On the other hand, a few spirantizing languages do not merge the two qualities. Because of that, it is not clear how and why an association is posited when there are such exceptions. The two processes may in fact be unrelated, co-occurring only fortuitously.

According to our data, the 7V/5V distinction divides Zone F in two groups, although this is not a unique Zone F feature. Many other zones have members with different vowel inventories in their membership (Nurse 1979), as is the case with the Southern Highlands group where the languages are predominantly 7V, although KiBena, KiPangwa and KiHehe are 5LS; in M30, CiNdali is 5LS, while iKɪNyakyusa is 7V; P20 is divided equally into 5LS and 5S; in North Nyanza, LuGanda and LuSoga are 5LS, while LuGwere is 6LS with /i/ and /ɪ/, but only /ʊ/.

On the other hand, SiSuumbwa, KiBende and KeeMbuwe are 5(L)S resembling language groups like some G50, G40, G20, G30, EJ30, EJ20, EJ25 and DJ60, among others (Nurse

---

[5] As shown in (5) and (6), the merging process in *ɪ/*e > e, *o/ʊ > o in F34, and *i/*ɪ > /i/, *u/ʊ > /u/ in F10 and F23, follow the more widespread pattern of Bantu language 7V vowel systems and their mergers described by Schadeberg (1994/5:73-75). For Zone F, that system is /i, ɪ, ɛ,a, ɔ, ʊ, u/. /e/ and /o/ represent /ɛ/ and / ɔ/ respectively.

1979, 1988). In eastern Bantu the 7V languages are fewer, and these include the majority of Zone F, E50, P10, and some G60.

The presence of similar vowel systems in other zones makes the 5LS feature a poor candidate for a good diagnostic tool of classification, unless it is taken together with BS.

KiBende and SiSiLoombo, SiYoombe and KiLooŋgo have merged their super close /i/ and /u/ and high /ɪ/ and /ʊ/ vowels to /i/ and /u/ respectively, while KeeMbuwe has merged the high vowels /ɪ/ and /ʊ/ with the mid /e/ and /o/ vowels respectively, resulting in /e/ and /o/. The following procedure was used to obtain the results:

(i) From the list of the 1036 words used in the study, all words with /ɪ/ and /ʊ/ were counted.

(ii) It was found that /ɪ/ occurred in 184 words and /ʊ/ in 279.

(iii) Out of the 184 words with /ɪ/, 34 or 18.5% were chosen, while for /ʊ/, 39 words or 14.0% out of the 279 words were selected.

(iv) The justifications for choosing those words as a representative sample were that:

(a) they were likely to be represented in all 22 varieties;

(b) they were mainly from core vocabulary based on the assumption that its occurrence is expected in any language;

(c) the target vowels were not followed by other vowels so that no gliding would occur, so as to avoid the assimilatory influence of other adjacent vowels.

The total number of the selected words in each category was judged to be representative because each group contained more than 10% of the 184 and 279 word sample respectively. The conclusions were therefore expected to be reliable, at least for Zone F.

Based on the data, the following conclusions were drawn, as shown in *Table 3.1* and *3.2*, and in the following rule of thumb based on three conditions: (a) if all words with /ɪ/ or /ʊ/ are counted from a list of at least 1000 words from PB; (b) if at least 200 words are extracted for each phoneme; and (c) if from those 200 words at least 40 words are carefully chosen so that they represent equitably all the varieties, then the following will be true in Zone F where 200 on average were used and 35 selected and actually used:

(i) 10 or less words consistently showing vowel/phoneme variation will indicate a stable 7V language;

(ii) 11-14 words will indicate a possibly changing language from 7V to 5V;

(iii) 15-35 words will indicate a clear 5V language.

From (i) to (iii), if half the phonemes change consistently away from the values of the proto-language, then it indicates a 5V language. On the other hand, the cut-off point of how many words should be used may not be so precisely determined because it involves judgement based on the data being used.

A shortcut method to determine whether a vowel system was 7V or 5V in other Bantu languages deriving from PB would be to take 30 common core items, do the counting and then test to see how many changes have taken place in that language or group of languages. A modified chart as represented by *Table 3.1* and *3.2* could be used to tally the results.

Table 3.1. 7V and 5V varieties in Zone F: /ɪ/ test

Number of Vowel changes out of 34 words	*Type and number of languages (varieties)*	*Examples with number of changes in brackets*
0 - 6 (less than 18%)	7V (17)	F31a (1), F31b (1), F21a (2), F21c (2), F22a (2), F22b (3), F24a (3), F22d (3), F31c (3), F32a (4), F32b (4), F32c (4), F22e (4), F24b (4), F33 (4), F21b (4), F25 (6)
7 - 20 (less than 59%)	7V/5V (0)	-
21 + (more than 62%)	5V (5)	F10 (28), F23a (26), F34 (23), F23b (21), F23c (21)

Table 3.2. 7V and 5V varieties in Zone F: /ʊ/ test

Number of Vowel changes out of 39 words	*Type and number of languages (varieties)*	*Examples with number of changes in brackets*
0 - 8	7V (17)	F31a (1), F31b (2), F22b (2), F21b (3), F22a (3), F32b (3), F21a (4), F21c (4), F31c (4), F32a (4), F24a (5), F22d (6), F25 (6), F24b (6), F33 (7), F32c (8), F22e (8)
11 - 14 (21-50%)	7V/5V (0)	-
15+ , (more than 51%)	5V (5)	F23b (26), F34 (21), F10 (21), F23a (21), F23c (20)

According to *Table 3.1 and 3.2*, on average, a consistent maximum of 8 phonemic changes would mean retention of clear 7V. A minimum 50% change pattern is required to qualify a language for a stable 5V. Such a formula can also be illustrated by KeeMbuwe's merging of the high with mid vowels. According to this formula as applied in *Tables 3.1* and *3.2*, and summarized in *Table 3.3* for /ɪ/, from a total of 31 words used, 7 or less phonemes retaining their Proto Bantu quality are not significant to make a language 7V. Conversely, 23 phonemes out of those 31 words changing from their original Proto Bantu quality *ɪ to /e/ is indicative of a clear 5V language, with a permanent shift to that status. Hence, because of the high figures of 71.9% and 65.6% scales of change in KeeMbuwe from i/ɪ to /e/ and from u/ʊ to /o/ respectively, such a change is regular.

Table 3.3 ɪ and ʊ change in KeeMbuwe

# of Words with /ɪ/ (31 out 34 or 91%)			# of Words with /ʊ/ (32 out of 39 or 82%)		
ɪ > ɪ	*ɪ > i*	*ɪ > e*	*ʊ > ʊ*	*ʊ > u*	*ʊ > o*
7 (23.6%)	1 (3.2%)	23 (71.9%)	9 (28.1%)	2 (6.2%)	21 (65.6%)

*Table 3.4. Evolution of *ɪ in Zone F and 7V 5V*

PB Word and Gloss	*Varieties with word*	*Varieties retaining /ɪ/*	*Languages with a vowel other than /ɪ/*	*Varieties with a different form*
*-bɪ 'bad'	21	8	F23a, F23b, F23c, F21a, F21c, F21b, F22b, F22a, F22e, F22d, F10, F25, F34 all have /i/ (13)	F33 (Used as a verbal) (1)
*-(n)yʊkɪ 'honey'	22	16	F23a /i/, F23b /i/, F23c /i/, F22e /i/, F10 /i/, F34 /e/ (6)	(0)
*bɪdɪ 'body'	21	17	F23a /i/, F23b /i/, F23c /i/, F34 /e/ (4)	F10 (1)
*-yamɪ 'chief'	3	0	F23a /i/, F23b /i/, F10 /i/ (3)	The rest (19)
*-cɪ 'country'	22	18	F23a /i/, F23b /i/, F10 /i/, F32c /e/ (4)	(0)
*-dɪm- 'cultivate'	22	17	F23a /i/, F23b /i/, F23c /i/, F10 /i/, F34 /e/ (5)	(0)
*-dɪd- 'cry, wail'	22	18	F23c /i/, F10 /i/, F32a /Ø/, F34 /e/ (4)	(0)
*-yanɪk- 'dry, vt'	21	9	F23a /i/, F23b /i/, F23c /i/, F21a /i/, F21b /i/, F22a /i/, F22e /i/, F10 /i/, F32b /i/, F24ba /i/, F25 /i/, F34 /e/ (12)	F31b (1)
*-gɪ 'egg'	20	17	F23a /i/, F23b /i/, F31c /ie/ (3)	F23c, F32c (2)
*-dɪdo 'fire'	6	1	F23a /i/, F23b /i/, F23c /i/, F22d /i/, F10 /i/ (5)	F21a, F21c, F21b, F22b, F22a, F22e, F31a, F31b, F31c, F32a, F32b, F32c, F24ba, F24a, F33, F34 (16)
*-yɪb(ɪdɪd)- 'forget'	14	10	F23c /e/, F22b/i/, F31a /i/, F34 /e/ (4)	F23a, F23b, F22a, F22e, F22d, F10, F33, F32b (8)

PB Word and Gloss	*Varieties with word*	*Varieties retaining /ɪ/*	*Languages with a vowel other than /ɪ/*	*Varieties with a different form*
*-pɪni 'handle, haft'	22	17	F23a /i/, F23b /i/, F23c /i/, F10 /i/, F34 /e/ (5)	(0)
*-cʊbɪ 'leopard'	17	15	F24a /i/, F24ba /i/ (2)	F23a, F23b, F23c, F10, F25 (5)
*-tɪma 'liver'	22	14	F23a /i/, F23b /i/, F23c /i/, F21b /e/, F10 /i/, F32b /i/, F24a /e/, F24ba/e/ (8)	(0)
*-yiŋgɪ 'many'	20	15	F23a /i/, F23b /i/, F23c /i/, F10 /i/, F25 /i/ (5)	F33, F31c (2)
*-jɪda 'path'	21	14	F23a /i/, F23b /i/, F32a /i/, F32b /i/, F32c /i/, F10 /i/, F34 /e/ (7)	F23c (1)
*-dɪp- 'pay'	22	17	F23a /i/, F23b /i/, F23c /i/, F10 /i/, F34 /e/ (5)	(0)
*-gadɪ 'stiff porridge'	21	14	F23a /i/, F23b /i/, F32b /i/, F32a /e/, F32c /e/, F10 /i/, F34 /e/ (7)	F23c (1)
*-bɪɪk- 'put, place'	13	10	F23c /i/, F10 /i/, F34 /e/ (3)	F23a, F21a, F21b, F22b, F22a, F22e, F22d, F24a, F24ba (9)
*-yɪm- 'pull up'	22	18	F23b /i/, F23c /e/, F10 /i/, F34 /e/ (4)	(0)
*-kupɪ 'short'	20	17	F25 /i/, F33 /i/, F34 /e/ (3)	F23c, F10 (2)
*-yɪmbo 'song'	21	17	F23a /i/, F10 /i/, F33 /i/, F34 /e/ (4)	F23c (1)
*-yɪm(ɪdɪd)- 'stand'	21	17	F23a /i/, F23c /i/, F10 /i/, F34 /e/ (4)	F32a (1)
*-kɪda 'tail'	19	15	F23b /i/, F23c /i/, F10 /i/, F34 /e/ (4)	F32a, F32b, F32c (3)
*-gɪn- 'thick, fat'	17	12	F23a /i/, F23b /i/, F23c /i/, F32a /e/, F32c /e/ (5)	F10, F31c, F25, F33, F34 (5)
*-dɪmi 'tongue'	22	18	F23a /i/, F23c /i/, F10 /i/, F34 /e/ (4)	(0)

PB Word and Gloss	*Varieties with word*	*Varieties retaining /ɪ/*	*Languages with a vowel other than /ɪ/*	*Varieties with a different form*
*-tɪ 'tree'	18	13	F23a /i/, F23c /i/, F10 /i/, F32c /e/, F34 /e/ (5)	F31a, F31b, F24ba, F25 (4)
*-bɪdɪ 'two'	22	17	F23a /i/, F23c /i/, F22d /i/, F10 /i/, F34 /e/ (5)	(0)
*-bɪcɪ 'unripe'	21	16	F23a /i/, F23b /i/, F23c /i/, F10 /i/, F34 /e/ (5)	F32a (1)
*-yɪm- 'upright'	21	16	F23a /i/, F32c /e/, F25 /i/, F10 /i/, F34 /e/ (5)	F31c (1)
*-gɪdɪ 'warthog'	22	19	F23a /i/, F23c /i/, F10 /i/ (3)	(0)
*-kɪ 'what'	15	10	F23b /i/?, F23c /i/?, F22d /i/, F10 /i/, F33 /e/ (5)	F23a, F31a, F31b, F31c, F32a, F32b, F32c (7)
*-dɪmɔ 'work'	22	16	F23a /i/, F23b /i/, F23c /i/, F10 /i/, F31c /i/, F34 /e/ (7)	(0)

*Table 3.5. Evolution of *ʊ in Zone F and 7V 5V*

PB Word and Gloss	*Varieties with word*	*Varieties retaining /ʊ/*	*Languages with a vowel other than /ʊ/*	*Varieties with a different form*
*-pʊtɛ 'abscess'	12	0	F23a, F23b, F23c, F21a, F21c, F21b, F22e, F10, F31c, F32c, F24a, F24ba All /u/ (12)	F22b, F22a, F22d, F31a, F31b, F32a, F32b, F25, F33, F34 (10)
*-dʊm- 'bite'	21	0	All have /u/ (21)	F10 (1)
*-tʊk- 'abuse, insult'	21	18	F23b /u/, F10 /u/, F34 /o/ (3)	F23c (1)
*-dʊgʊ 'brother, relative'	13	11	F23c /u/, F23b /u/ (2)	F25, F34, F23c, F10, F31a, F31b, F31c, F32b, F33 (9)
*-kʊŋgʊdʊ 'crow'	17	15	F22e /u/, F23b /u/ (2)	F22d, F23a, F23b, F23c, F10 (Blank) (5)

PB Word and Gloss	*Varieties with word*	*Varieties retaining /ɑ/*	*Languages with a vowel other than /ɑ/*	*Varieties with a different form*
-cikɑ/-tikɑ 'day'	18	13	F23a /u/, F23b /u/, F22e /u/ F33 /u/, F34 /o/ (5)	F10, F23c, F31a, F31b (4)
*-gɑd- 'buy'	21	16	F23a /u/, F23b /u/, F23c /u/, F22e /u/, F10 /u/ (5)	F25 (1)
*-yijɑd- 'become full'	11	10	F23c /u/ (1)	F22b, F22a, F22e, F22d, F10, F33, F23b, F23a, F21a, F21c, F21b (11)
*-bɑdi 'goat'	22	20	F10 /u/, F34 /o/ (2)	(0)
*-kɑd- 'grow'	22	18	F23b /u/, F23c /u/, F10 /u/, F34 /o/ (4)	(0)
*-kɑdɑ 'great, big'	16	14	F23b /u/, F10 /u/ (2)	F23c, F21b, F34, F22b, F22a, F21a (6)
*-yaŋgɑ 'haste'	20	15	F23a /u/, F23b /u/, F23c /u/, F10 /o/, F31b /o/ (5)	F31c, F25 (Blank) (2)
*-dɑndɑ 'heap'	16	11	F32a /u/, F32b /u/, F23b /u/, F23c /u/, F24ba /u/ (5)	F22d, F10, F31b, F23a, F21a, F34 (6)
*-yɑkɪ 'honey'	22	17	F23a /o/, F23b /o/, F23c /o/, F10 /u/, F34 /o/ (5)	(0)
*-dɑme 'husband'	6	1 (F25)	F23a /u/, F23b /u/, F22d /u/, F33 /u/, F34 /o/ (5)	F23c, F21a, F21c, F21b, F22b, F22a, F22e, F31a, F31b, F31c, F32a, F32b, F32c, F24a, F24ba, F10 (16)
*-bɑd(ag)- 'kill'	17	16	F34 /o/ (1)	F10, F23a, F23b, F23c, F25 (5)
*-cɑbɪ 'leopard'	16	15	F31c /u/ (1)	F10, F32b, F25, F23a, F23b, F23c (6)
*-gɑdɑ 'leg, foot'	21	17	F23a /u/, F23b /u/, F23c /u/, F10 /u/ (4)	F25 (1)

PB Word and Gloss	*Varieties with word*	*Varieties retaining /ʊ/*	*Languages with a vowel other than /ʊ/*	*Varieties with a different form*
*-pʊʊpʊ 'lung'	16	15	F33 /u/ (1)	F22a (Blank), F10, F23a, F23b, F23c, F21b (6)
*-bʊ 'mosquito'	20	15	F23a /u/, F23b /u/, F22e /u/, F24ba /u/, F34 /o/ (5)	F33, F10 (2)
*-bʊʊmb- 'mould'	21	16	F23a /u/, F23b /u/, F23c /u/, F10 /u/, F34 /o/ (5)	F25 (1)
*-tikʊ 'night'	19	15	F22d /u/, F10 /u/, F24a /u/, F34 /u/ (4)	F23a, F23b, F23c (3)
*-pʊda 'nose'	11	9	F33 /u/, F34 /o/ (2)	F22b, F22e, F22e, F22d, F23a, F23b, F23c, F21a, F21c, F21b, F10 (11)
*-dugʊd- 'open'	18	3	F32a /u/, F23b /u/, F32c /u/, F10 /u/, F34 /o/ (5)	F23c, F22d, F25, F33 (4)
*-ntʊ 'person'	22	16	F23a /u/, F23b /u/, F23c /u/, F22d /u/, F10 /u/, F34 /o/ (6)	(0)
*-kʊʊnda 'pigeon'	17	6	F23c /u/, F23c /u/, F21a /u/, F21c /u/, F22b /u/, F22e /u/, F22d /u/ F22a /u/, F10 /u/, F32b /u/, F32c /u/ (11)	F23b (Blank), F33 (Blank), F21b, F24ba, F34 (5)
*-nʊŋgʊ 'porcupine'	17	15	F10 /u/, F32a /u/ (2)	F31c, F22a (Blank), F23a, F23b, F23c (50
*-nʊŋgʊ/ nyʊŋgʊ 'pot'	21	16	F23a /u/, F23b /u/, F23c /u/, F33 /o/, F34 /o/ (5)	F10 (1)
*-nyʊ 'salt'	17	0	13 have /u/, except F23c, F22d, F32c, F34 with /o/ (4)	F10, F31a, F31b, F24ba, F33 (5)
*-yikʊt- 'be satiated'	21	17	F23a /u/, F23b /u/, F10 /u/, F34 /o/ (4)	F23c (1)

PB Word and Gloss	*Varieties with word*	*Varieties retaining /ʊ/*	*Languages with a vowel other than /ʊ/*	*Varieties with a different form*
*-beyʊ 'seed'	17	17	(0)	F23a, F23b, F23c, F22d, F10 (5)
*-tʊm- 'send'	20	15	F23a /u/, F23b /u/, F23c /u/, F10 /u/, F34 /o/ (5)	F22a, F31b (2)
*-dʊmbʊ 'sister'	17	14	F23a /u/, F23b /u/, F10 /u/ (3)	F23c, F31b, F32b, F32c, F34 (5)
*-tantatʊ 'six'	11	10	F34 /o/ (1)	F23a, F23b, F23c, F22b, F22e, F22d, F10, F24a, F24ba, F25 (Blank) (11)
*-tʊdo 'sleep' (n)	17	12	F23a /u/, F23c /u/, F32c /o/, F10 /u/, F34 /o/ (5)	F31a, F31b, F32a, F24a, F24ba (5)
*-gʊmba 'sterile person'	20	16	F23b /u/, F23c /u/, F10 /u/, F34 /o (4)	F32c, F32b (2)
*-ntʊ 'thing'	21	15	F23a /u/, F23b /u/, F23c /u/, F22e /u/, F10 /u/, F32a /u/ (6)	F34 (1)
*- tatʊ 'three'	22	13	F23a /u/, F23b /u/, F23c /u/, F32a /u/, F32c /u/, F10 /u/, F24a /u/, F24ba /u/, F34 /o/ (9)	(0)
*-yedʊ 'white'	14	8	F22d /u/, F32c /u/, F24a /u/, F24ba /u/, F33 /u/ F34 /o/ ((6)	F23a, F23b, F23c, F10, F21a, F21b, F22b, F22a (8)

3.1.2. Bantu Spirantization (BS)

Bantu Spirantization is a phonological lenition rule whereby Proto Bantu (PB) consonants, represented as plosives, weaken to become fricatives in front of the Proto Bantu superclose (SC) vowels *i and *u. This process occurs in many of the Bantu languages and their

varieties. As a rule of thumb, in most of Bantu, the plosives *p, *t, *c, *k, *b, *d, *j, and *g followed by superclose *i and *u weaken, change to fricatives and become different from those followed by lower vowels *ɪ, *e, *a, *o, *ʊ and their long counterparts. In other words, in languages with BS, the reflexes of stops before PB [+superclose] must be different from those before PB [-superclose], otherwise, it is not Bantu Spirantization. While both are assimilatory processes, Bantu Spirantization differs from palatalization in that while BS refers specifically to the two superclose vowels /i/ and /u/ modifying Proto Bantu plosives to be fricatives; palatalization involves front vowels generally which assimilate consonants towards the hard palate, and hence acquiring the place features of the hard palate.

Bantu Spiranzation is also known by the general name of (consonant) mutation (Hyman 1994:85, Zoll 1995). Hinnebusch and Nurse (1981:51) define it as 'that shift, or series of shifts wherein the Proto Bantu (PB) segment *p, *t, *k, *B, *l and *G when followed by the Proto Bantu close vowels *į and *ų, become fricatives (spirants) or affricates...' This process is realized differently by the different Zone F varieties as shown in the examples below. The patterns of this variation may be a diagnostic criterion in classification, especially if a distinction is made between regular BS and the associated 7V to 5V reduction and palatalization. The examples below show the superclose and other lower vowels indicating the effects on the plosives for each group of vowels. In the examples, the regular reflexes of PB *p, *b, *t, *d, *c, *j, *k, and *g are indicated for Zone F, with the members in each group compared with similar varieties from other zones. The aim of including examples from areas

outside Zone F tests whether Zone F has any uniqueness in relation to BS. The data for those other language groups or varieties are mainly taken from Nurse (1979:413-463). The reflexes in other zones, language groups or varieties are provided, unless they were not found in the data. The non-high vowels are also shown since they normally indicate the unmarked, regular reflexes as permanent sound changes from Proto Bantu, contrasting with the results of superclose vowels in the languages in which they have an effect.

*3.1.2.1 Reflexes of *p /_ V [-superclose]*

(a) [p] KɪnɪLaamba, KɪKɪɪmbʊ, ɪCɪWʊʊŋgʊ [*G40, G50, G*60]
(b) [f] GɪRwana/GiAhi, GiAhi, KeeMbuwe
(c) [h] SiSuumbwa, KɪSukuma, KiBende [*EJ10, EJ20, some EJ30, Some E60, G22, E74b, E72, G30, some E50*]
(d) [ɸ/f] ɣɪnyaMunyiŋanyi [6] [*E71*]
(e)[h/p] KɪDakama, KɪNyanyeembe, KɪKonooŋgo, SiGalagaanza

---

[6]The other KɪRɪmi varieties with /f/ may only be displaying a spelling-pronunciation tradition whereby the earlier writers of the language did not write the /ɸ/ sound appropriately because of several reasons. These reasons may include technological problems where the typewriters and printing presses of the time had no such fonts; improper sound perception because the recorder had no experience with such sounds in his/her language; or simple carelessness on the part of the earlier writers who had assumed that such details do not count even in the long run. The native speakers in such a situation develop a tendency of hypercorrecting in favour of the privileged, even though misleading and incorrect representation. This is also common in KɪSukuma (as elsewhere) where proper names with the rounded velar nasal /ŋw/, as voiced or voiceless, are written and pronounced by many native speakers of KɪSukuma by the bilabial nasal /mw/. The /mw/ is the nearest sound which the dominant writing traditions in Tanzania (KiSwahili and English) could use. On their part, KiSwahili and English acquired their alphabet from the Roman script which has no such sound, and they passed it on without modification to KɪSukuma. Examples, with the appropriate sounds in brackets, include common place and personal names like Mwanza (ŋwaanza), Mwadui (ŋwaaduβi), Mwandu (ŋwaandʊ), Mwashi (ŋwaashi), Mabuki (*sic*) (ŋwaaβʊʊkɪ), Mwani (ŋhwaani (or [ŋ̊waani], with the diacritic /◌̥/ underneath or above the nasal showing voicelessness). Muundani (ŋhuundani). Kiɸokomo (E71), as an example, seems to have been transcribed correctly.

(f) [h/f] KiiRaŋgi

A significant classificatory observation refers to KIRImi (GiAhi, GIRwana and ɣInyaMunyiŋanyi), the only language with [f] as the reflex of *p in non-high, unmarked environments. This in part accounts for the fact that KIRImi might have evolved from a different path from the rest of the eastern Bantu languages. In addition the current data differ from Nurse's (1979) in one instance where he shows that F33 has only one reflex, [h], while in our survey [f] was seen as another active and productive reflex. This may partly be explained by at least three reasons: difference of informant ideolect; a language in the process of being influenced by its neighbour, probably KIRImi; or the inclusion of borrowed words in the count of our survey which could not be detected and removed.

Another significant feature is the widespread distribution of [h] around the contiguous EJ and G zones. This may suggest common ancestry before dispersal, although absolute dating of such splits may not be ascertained reliably. Acquisition of the feature due to contact may not be a satisfactory explanation unless such widespread distribution implies also long contact for the transfers to take place.

On the other hand KINyamweezi (KIDakama, KINyanyeembe, KIKonooŋgo and SiGalagaanza) displays an innovation which sets it apart from all of Zone F and North East Bantu in this phonetic environment. It retains both [p] and [h] as regular reflexes before non-

high vowels. This needs an explanation. It is a similar case with F33 [h/f] where two forms co-exist. Why this partial change? This question is answered in *3.2.5* on the interpretation of glottalization and chronology.

As can be observed in the unmarked environment of *p, each reflex is represented by one, two or three languages with its dialects, as in the example of KɪNyamweezi with all its varieties showing *p > p/h.

*3.1.2.2 Reflexes of *p _ i [+superclose]*

(a) [p] KɪnɪLaamba, KɪKɪɪmbʊ *[Mainly non-spirantizing languages belong here, because *i tests spirantization in Bantu]*
(b) [h] SiSuumbwa
(c) [ʃ] KɪSukuma, KɪDakama [*E50, E62c, G12, EJ23, some DJ60*]
(d) [f] KɪNyanyeembe/SiGalagaanza, KiBende, GɪRwana/GiAhi, KiiRaŋgi, KeeMbuwe [*G22, E74b, G40 E70, G30, EJ25, some DJ60, G50, G60*]
(e) [s] KɪKonooŋgo [*E62a, some G40, some EJ10, some EJ30, EJ25, parts of EJ20, G65*]
(f) [s/f] ɪCɪWʊʊŋgʊ
(g) [f/ɸ] KɪRɪmi

The reflexes in a language like ɪCɪWʊʊŋgʊ show an inconsistency, suggesting a mixture of sources, as shown in (7). Five languages (seven varieties) in Zone F have [f] as the reflex of *p/_i, and two languages each retain [p] and shift to [ʃ] respectively. It is interesting, however, to note that, among those with [ʃ], one of the variety comes from KɪNyamweezi while the other three come from KɪSukuma. It is SiSuumbwa alone which shifts to [h] in all its varieties, while ɪCɪWʊʊŋgʊ shifts to either [s] or [f], although Labroussi (1999:360-1) observes only [f]. While the data were limited in our case, the [s] alternation is especially

convincing since it occurs in words which are quite widespread in Bantu languages in general, unless ICIWʊʊŋgʊ got them through borrowing from another language, as shown in (7). The words for 'arrive' *-sʊk-* and 'knife' *cisu* appear suspect because of their radically changed forms, although *sina*, 'pinch' is plausible. That word with [s] may not be the only one in the ICIWʊʊŋgʊ lexicon, although it is obvious that the evidence for [f] is quite solid even with these few words, as Labroussi found out. On the other hand, a mixture of reflexes points to something else, as discussed in Chapter 5.

(7) Reflexes of PB *pi in ICIWʊʊŋgʊ

*-pik- 'arrive	*-sʊka*
*-piga 'hearthstone'	*ifiya*
*-pi ʊ 'knife'	*cisu*
*-kapi 'oar'	*ɪɪŋgafi*
*-pin(i)- 'pinch'	*-sina*

*3.1.2.3 Reflexes of *p _ u [+superclose]*

(a) [p] KInILaamba, KIKIImbʊ?
(b) [f] The rest of Zone F varieties [*Many others, except EJ25 [s] and G60 [h]*]

Most of the languages in Zone F have [f] as the reflex of *p/_u . Two languages, KInILaamba and KIKIImbʊ, retain [p], although due to a mixture of languages, KIKIImbʊ's status is not clear because of having [f] in some words. In words like *-pum- 'go out', the likelihood is borrowing, since it is *-fuma*, an unlikely native form in KIKIImbʊ.

Sections 3.1.2.1 to 3.1.2.3 suggest the following based on PB *p. KInILaamba, KIKIImbʊ

KeeMbuwe and most of KIRImi have not spirantized because in them, the reflexes of PB *p are identical before all vowels. For the others, SiSuumbwa shows mainly glottalization, and KiBende displays BS. The rest present a mixed picture.

*3.1.2.4 Reflexes of *b _ V [-superclose]*

(a) [β] SiSiloombo/SiYoombe, KISukuma, KINyamweezi, KIRImi) [*E60, E74b, G11, G60, EJ10 20, some E50*]
(b) [β/b] KiLooŋgo, KiBende, KIKIImbʊ
(c) [β/Ø] GIRwana/GiAhi
(d) [b/Ø] KInIHaanzu
(e) [Ø] KInaUshoola/KInILaamba C [*some E60, E74b, G40 E70, G30*]
(f) [v] KeeMbuwe [*G22, J32, EJ43, G50, G41*]
(g) [v/Ø] KiiRaŋgi
(h) [w] ICIWʊʊŋgʊ [*Some E60, E74b, G40 E70, G30, some G60, G50*]

The reflex [b] on its own without any other alternation was not found in Zone F. It seems to occur, most probably, in complementary distribution with another fricative or zero[7]. This suggests that at initial position it is retained in some languages, while intervocalically it is weakened to the fricative /β/ and lost altogether in others. This made *b one of the most unstable sounds in Zone F, since it has changed in all varieties, including in KIKIImbʊ and KInILaamba, languages which are relatively more conservative, closer to PB than any others in the zone.

[7] In this context, a 'zero' sound or reflex, also represented as [Ø], signifies that the sound was lost in that environment. When observations were not made, then no data are recorded, represented by a dash (-). Both 'zero' and 'dash' refer more to observation than to absolute presence or absence of a sound in a language.

*3.1.2.5 Reflexes of *b _ i [+superclose]*

(a) [v] SiSiloombo/SiYoombe ɪCɪWʊʊŋgʊ, KiiRaŋgi, KeeMbuwe [*E74, G22, G40 E70, J15-7, G50, DJ60*]
(b) [β] KɪSukuma
(c) [β/v] KɪNyanyeembe/SiGalagaanza/KɪKonooŋgo
(d) [β/f] KɪDakama
(e) [f] KiBende [*E60, G12, J30, EJ25, G52, G60*]
(f) [Ø] KɪnɪLaamba C
(g) [[Ø/b] KɪnaUshoola/KɪnɪHaanzu, KɪRɪmi
(h) [β/b] KɪKɪɪmbʊ
(i) [z] KiLooŋgo [*some G43, Rutara*]

In the *b sound, it is mainly KɪDakama which shows a significant alternation in the reflex between [β/f], a situation likely to be due to having two sources of the reflexes. Others like KɪKɪɪmbʊ [β/b] suggest only allophonic variation or borrowing, the later being more probable given the high fidelity of KɪKɪɪmbʊ to Proto Bantu. The KɪNyamweezi dialects (KɪNyanyeembe/SiGalagaanza/KɪKonooŋgo), excluding KɪDakama, have [β/v], partly suggesting orthographic influences and partly because of the sounds originating from two sources. In the former case, the bilabial fricative /β/ in many Bantu languages is represented as <v> where it is confused with the regular labiodental <v>. It is later hyper-corrected both in writing and speech and adopted in the system . KɪnɪLaamba and KɪRɪmi usually lose *b.

*3.1.2.6 Reflexes of *b / _ u [+superclose]*

(a) [β] KɪSukuma, KɪDakama
(b) [Ø] KɪnɪLaamba, KɪRɪmi, KɪKɪɪmbʊ?
(c) [v] SiSiloombo/SiYoombe, SiGalagaanza, ɪCɪWʊʊŋgʊ
(d) [f] KiBende
(e) [z] KiLooŋgo
(f) [w] KɪKonooŋgo?

(g) [Ø/v] KiiRaŋgi
(h) [y?/Ø] Keembuwe

Using *b/_u and its reflexes in Eastern African languages alone, Zone F seems unique in having [β] among the reflexes. According to Nurse's (1979:458) survey of the Eastern African languages, it is the only zone with [β] in that environment. Such a pattern is suggestive of a shared history between its members, although close proximity might have played a role. The only varieties in Zone F without any trace of [β] are 4: KInILaamba, KiiRaŋgi, KeeMbuwe and ICIWUUŋgU. It is easier to explain KInILaamba, since it is a conservative language phonologically, retaining traces of [b]. On the other hand, KiiRaŋgi, KeeMbuwe and ICIWUUŋgU are isolated because of their reflexes of *b and this gives more weight to the skepticism in grouping these varieties within Zone F. Normally, the usual process of *b loss is common, in Sabaki, but also in many other Bantu languages (Nurse and Hinnebusch (1993:89-98):

(8) *b loss

*b → /β/ ~ /v/ → /w/ → /Ø/

Another candidate for that skepticism, KiBende, has some traces of [β], indicating that it has some affiliation with the other Zone F varieties. However, that affiliation may be only geographical too, among others, because it is closest to KIKonooŋgo, a likely source of borrowing

The evidence for BS based on PB *b is as follows. KIKIImbʊ, KInILaamba, KISukuma, some parts of KINyamweezi, K IRImi and maybe KeeMbuwe and KiiRaŋgi do not spirantize because they have identical reflexes of PB *b before all vowels. On the other hand, SiSuumbwa, KiBende and ICIWʊʊŋgʊ show BS because the superclose vowel environment is different from the low vowel PB *a.

*3.1.2.7 Reflexes of *t / _ V [-superclose]*

(a) [t] All except KIRImi[x]
(b) [R] GIRwana/GiAhi
(c) [R/t] ɣInyaMunyiŋanyi

KIRImi has the voiceless flap [R] as an allophone of /t/. It becomes [t] when it is prenasalized (Olson 1964:13). On the other hand, ɣInyaMunyiŋanyi (F32c) has double reflex indicating that the allophones seem to be in free variation. For the rest, there is no change from Proto Bantu, just as it is in the majority of other Bantu languages surveyed by Nurse (1979).

*3.1.2.8 Reflexes of *t / _ i [+superclose]*

(a) [t] KInILaamba, KIKIImbʊ [*E65, E62a*]
(b) [R] GIRwana/GiAhi
(c) [t/s] (SiSiloombo/SiYoombe, KiLooŋgo, GInaNtuzu, KINyanyeembe/SiGalagaanza /KIKonooŋgo, KiBende, ICIWʊʊŋgʊ, KeeMbuwe[9] [*These have only [s]: E62c, G40 E70,*

---

[x] For comparison, outside of Zone F, all have [t], except E60, some G40, some EJ30 have [r]; some E60 [d]; E611 [h]; some G41 [c] (Nurse (1979).

[9] The word *-tindIk- 'push' may be a wrong indicator, since in KeeMbuwe, it is the only irregular one, suggesting borrowing than internal sound change. In this case, it displays
(continued...)

G30, EJ, G50, G60]
(d) [t/ʃ] KɪmunaSukuma, JinaKɪɪya, KɪDakama [*These have only /ʃ/: G22, E74b, G23*]
(e) [R/t] ɣɪnyaMunyiŋanyi
(f) [c/t] KiiRaŋgi

In Zone F, KɪKɪɪmbʊ (F24) and KɪnɪLaamba (F31) continue to show that they are stable phonologically, while the rest show divergence from Proto Bantu. The others like KɪSukuma and KɪNyamweezi indicate double reflexes: the inherited form and a mutated one. Where two reflexes co-exist, one or the other is likely to be the native, regular sound change in that language, while the other may be from a different source. This difference of source is interpreted in Chapter 5. ɪCɪWʊʊŋgʊ, KiBende and KiLooŋgo display the double reflex pattern of the majority of Zone F languages with [t/s] indicating external influence over their phonological processes.

*3.1.2.9 Reflexes of *t / _ u [+superclose]*

(a) [t] KɪnɪLaamba, KɪKɪɪmbʊ, ɪCɪWʊʊŋgʊ, KeeMbuwe
(b) [t/s] SiSiloombo, KɪSukuma, KɪDakama, KɪNyanyeembe, KɪKonooŋgo, KiBende
(c) [s] SiYoombe [*G23 24 31 34, EJ17, G65*]
(d) [s/c] KiLooŋgo
(e) [R] GɪRwana/GiAhi
(f) [R/t] ɣɪnyaMunyiŋanyi
(g) [c] KiiRaŋgi[*G22, E74b, EJ20 EJ11-4*]
(h) [f/t/s] SiGalagaanza

The evidence of PB *t/_u suggests that SiSuumbwa and KiBende have BS, although they

---

[9](...continued)
the phonological stability in this phoneme like KɪKɪɪmbʊ and KɪnɪLaamba, as indicated in *t _u.

have traces of some non-spirantizing *t. KIKIImbU (F24), and KInILaamba (F31), KIRImi (F32) do not show any traces of BS while the rest display a mixed picture like in PB *p. A feature to note in Zone F is the absence of [f] as a reflex of *t which is found in KiChaga (E60), Sabaki (G40/E70), Ruvu (G30), much of Lacustrine (EJ), Kilombero (G50) and Southern Highlands (G60). It is one argument for the validity of Zone F, although as negative evidence it is not as strong as presence of a feature. One of the most interesting case here is that of KiiRaŋgi with its reflex /c/. For many years, if not decades or centuries, it was adjacent to non-Bantu languages like Maasai and Sandawe but seems to have received no influence from them. Instead, KiiRaŋgi shares some features with Bantu languages which are geographically distant, today[10]. It is not clear whether such similarity is chance or genetic.

*3.1.2.10 Reflexes of *d / _ V[-superclose]*

(a) [l] All, except KIRImi, KiiRaŋgi, KeeMbuwe
(b) [l/r] KiiRaŋgi, KeeMbuwe
(c) [Ø/l/r] KIRImi

*3.1.2.11 Reflexes of *d / _ i[+superclose]*

(a) [l] KInILaamba, GIRwana/GiAhi, KIKIImbU
(b) [r] ɣInyaMunyiŋanyi, KiiRaŋgi, KeeMbuwe [*E60*]
(c) [z] ICIWUUŋgU [*E74b, G40 E70, G30, some EJ, DJ60, G50*]
(d) [s] KiBende [*G12, some EJ30, EJ25, G52, some G60*]
(e) [z/l] SiSiloombo/SiYoombe, KiLooŋgo, GInaNtuzu, KINyamweezi
(f) [j/l] KImunaSukuma/JinaKIIya [*With [j] only: G22, G40/E70*]

---

[10] KiiRaŋgi has [c] which is also found in neighbouring KiPare (G22) and Saghala (E74b), and in Rutara (EJ20/EJ11-4).

*3.1.2.12 Reflexes of *d / _ u[+superclose]*

(a) [l] KɪnɪLaamba, KɪKɪɪmbʊ
(b) [l/d/r] KeeMbuwe
(c) [r/d] KiiRaŋgi
(d) [v/l]SiSiloombo/SiYoombe, SiGalagaanza
(e) [z/l] KiLooŋgo, GɪnaNtuzu, KɪNyanyeembe/KɪDakama/KɪKonooŋgo *[These have [z] only: G23 23 31 34, parts of EJ20]*
(f) [z/l/d] KɪmunaSukuma/JinaKɪɪya
(g) [f/l] KiBende
(h) [Ø/l/r] KɪRɪmi
(i) [v] ɪCɪWʊʊŋgʊ *[G40 E70, G30, EJ15-7, DJ60, G50]*

One of the significant features of *d/_u reflexes is the isogloss joining SiSuumbwa and SiGalagaanza, both of which have [v/l]. On the other hand, KiBende also shares some significant features with SiSuumbwa, although the major difference is in its devoicing of the labio-dental [v], and hence the reflex becomes [f/l], a fact observed by Nurse (1988:58). This sharing of phonological features between SiSuumbwa and SiGalagaanza is not found in this context only. Further phonological contexts might cast light on the assumption that SiGalagaanza may be closer to SiSuumbwa linguistically than it is to KɪNyamweezi, although one can also argue that it is close proximity that makes SiGalagaanza share features with SiSuumbwa. The *d/_u [+superclose] context also strengthens the notion that as individual varieties, KɪKɪɪmbʊ, KɪnɪLaamba and KɪRɪmi are solid entities, while KɪSukuma, KɪNyamweezi and SiSuumbwa each have each some internal coherence. If they have any unity, then it is riddled with unresolved anomalies as displayed by the reflexes. ɪCɪWʊʊŋgʊ, KiiRaŋgi and KeeMbuwe seem autonomous in their own right, each displaying occasionally unique features not found in the rest of Zone F members, as with the unique case of

ɪCɪWʊʊŋgʊ with [v] as the reflex of *d.

Evidence for BS is solid in KiBende and ɪCɪWʊʊŋgʊ,while its absence clear in KɪnɪLaamba, KɪRɪmi, KɪKɪɪmbʊ, KeeMbuwe and KiiRaŋgi. The situation is mixed in SiSuumbwa, KɪNyamweezi and KɪSukuma with double reflexes, indicative of interference.

*3.1.2.13. *k/_V [-superclose]*

(a) [k] All, except KɪRɪmi, KɪKɪɪmbʊ
(b) [k (x)] GɪRwana, ɣɪnyaMunyiŋanyi
(c) [x (k)] GiAhi, KɪKɪɪmbʊ

The sound *k shares some features with non-high vowels in that the [-high] or [-superclose] feature of the vowels does not have a conflict with the [+back] feature of /k/ which makes /k/ low. It may be this similar feature specification which makes the distribution of /k/ relatively uniform in all of Zone F, except for KɪRɪmi and KɪKɪɪmbʊ, with [x] as an allophonic alternation occurring in complementary distribution with [k]. In KɪRɪmi and KɪKɪɪmbʊ [x] occurs only before vowels with the [+back, -high] features, that is /a/ and /o/, and not the front and high ones like /e/, /ɪ/, /i/ or /u/ because they modify the [+back] feature of /k/ by pulling the place of articulation away from regular velar position. Thus, [x] is only phonetic rather than phonological.

*3.1.2.14. *k/_i [+superclose]*

(a) [k] KɪnɪLaamba, GɪRwana, ɣɪnyaMunyiŋanyi, KɪKɪɪmbʊ-North
(b) [x] GiAhi?
(c) [f] KiLooŋgo
(d) [c] KɪmunaSukuma
(e) [f (k)] SiSiloombo, SiYoombe
(f) [f/k] KiDakama, KiNyanyeembe, SiGalagaanza
(g) [c/k] GɪnaNtuzu, JinaKɪɪya, KɪKɪɪmbʊ South, KiiRaŋgi
(h) [f/s] KiBende
(i) [f/ʃ] ɪCɪWʊʊŋgʊ
(j) [k/y] KeeMbuwe

The [k] reflex is expected in KɪnɪLaamba, KɪRɪmi, KɪKɪɪmbʊ, KiiRaŋgi and KeeMbuwe as non-spirantizing varieties. But in KɪRɪmi, two varieties meet the expectation, while GiAhi has [x][11]. This can be regarded as an allophone of [k], as pointed out above for the low vowels. Here, it has been generalized to the [+high] context as well. In addition, the fricative [x] may be due to the palatalizing effect of *i. Likewise, KɪKɪɪmbʊ South has an alternation [c/k]. The [c] is also a likely palatal effect of the verb itself for 'die' *-ki-, rather than spirantization. As well, it may be a transfer from linguistic neighbours like KɪSukuma whose speakers have immigrated into the Rukwa area in large numbers since the early 1970s. Their numerical strength might have had an immediate impact on KɪKɪɪmbʊ-South. As a strongly conservative variety, KɪKɪɪmbʊ's innovation might be a recent and limited one in words like [ca] 'die' <*-ki-[12]. Such an innovation causing double reflexes is mainly idiolectal due to

[11] The reliability of [x] as a sole reflex of *k in this phonetic environment is not solid in GiAhi since the set of words for comparison in *k/_i [+superclose] were 7 in all, 2 of which were questionable, 3 were not filled, while 1 appeared to be borrowed.

[12] Such an environment can be best described as kiV ~ ciV ~ cV as a first step in (continued...)

contact rather than dialectal.

The double reflex phenomenon is explained further in **3.1.3**. in discussions about KɪSukuma, KɪNyamweezi and SiSuumbwa where the phenomenon is more widespread. As a rule of thumb, where one of the reflexes in a suspected Bantu Spirantization case includes a stop, then Bantu Spirantization is doubtful. Of the spirantizing varieties in Zone F, only KiLooŋgo, KiBende and ɪCɪWʊʊŋgʊ display a true fricativization without traces of stops in the *k/_i [+superclose] environment. The rest show only traces of Bantu Spirantization, which suggests a contact situation resulting in a transfer of some features.

On the other hand, *k/_i [+superclose] shows the most variation of double reflexes where [k] alternates with another sound, a fricative or another stop, the [c]. This is a strong argument for limited Bantu Spirantization in Zone F, since, as Nurse (1979:462) shows, spirantizing languages have [s] as a regular reflex before *i. Only KiBende has [s]. KiBende can thus be regarded as a spirantizing language, with a five vowel system. On the other hand, both Schadeberg (1995:83) and Guthrie (1967-1971:47)[13] regard KiToŋgwe, another name for KiBende/KiToŋgwe[14] as 7V. Schadeberg (1995:83) shows that although KiToŋgwe

---

[12](...continued)
palatalization before consonants, i.e. kiC as it becomes a regular process (where V and C are any vowels and consonants respectively).

[13]*Comparative Bantu*. 1971. *Part I, Vol. 2.*

[14] Kapepwa K. Táámbilá (p.c.15th April 2000), a speaker of KiBende/KiToŋgwe and (continued...)

(F11) is 7V it has full BS, a position which supports our data on superclose vowels. However, our data do not only show clear BS, but also show a clearly 5V variety.

*3.1.2.15. *k/_u [+superclose]*

(a) [k] KɪmunaSukuma, GɪnaNtuzu, KɪnɪLaamba, GɪRwana, ɣɪnyaMunyiŋanyi, KɪKɪɪmbʊ-South, KeeMbuwe
(b) [f] SiSuumbwa, SiGalagaanza, KiBende
(c) [k (f)] JinaKɪɪya, KiDakama, KiNyanyeembe
(d) [k/f][15] KiKonooŋgo, KɪKɪɪmbʊ-North, ɪCɪWʊʊŋgʊ, KiiRaŋgi
(e) [x/(f)] GiAhi

Apart from the varieties with alternations, it is only SiSuumbwa and KiBende which display a consistently Bantu Spirantization system. SiGalagaanza behaves like these two, most probably as an areal influence, since such an affiliation to both KiBende and SiSuumbwa does not end at phonological level alone, but is illustrated by the vocabulary as well. Predictably *k = [k] is found in KɪnɪLaamba, KeeMbuwe, and parts of KɪKɪɪmbʊ and KɪRɪmi, and KɪSukuma.

---

[14](...continued)
professor of history at the University of Dar Es Salaam, says that the distinction between KiBende and KiToŋgwe is not linguistic. It is only geographical since the KiBende speakers reside along the Lake Tanganyika shores while the so-called KiToŋgwe speakers live in the mountains. The language is one. With the advent of "tribal" labels for the linguistic communities of Africa, the division only helped create two identities which were formerly one entity. Such an argument is not an illegitimate appeal to authority by invoking Táámbílá's knowledge of history. It is fairly plausible, since in some literature there are such cases of pseudo-languages and dialects. For instance, KiKonooŋgo is regarded as a language apart from KiNyamweezi, just as many dialects and some languages like KiLooŋgo are not even mentioned, mainly because there is no information about them.

[15] An occurrence of [k/f] shows almost equal frequency of distribution, hence a reversed order [f/k] refers to the same equation of the form: 'if *a* and *b* have the same values, then the sequences *a*/*b* and *b*/*a* are equal'. Order is therefore not important in such a case.

Clear indications of BS include ɪCɪWʊʊŋgʊ and KiBende. SiSuumbwa also shows some consistency, despite the interference with non-spirantizing elements. KɪSukuma and KɪNyamweezi continue to show the double reflex mixture of spirantizing and non-spirantizing forms and others which do not. KiiRaŋgi also shows double reflexes indicating interference. On the other hand, KɪnɪLaamba, KɪKɪɪmbʊ, KɪRɪmi and KeeMbuwe do not show BS.

*3.1.2.16. *g/_V [-superclose]*

(a) [g] SiSuumbwa, KɪSukuma, KɪNyamweezi, KɪnɪLaamba, KɪKɪɪmbʊ
(b) [ɣ] KiBende, KɪRɪmi
(c) [g/Ø] ɪCɪWʊʊŋgʊ
(d) [Ø/v] KeeMbuwe, KiiRaŋgi

Prominent features with the reflexes of *g are the alternations [v] and [Ø] in KeeMbuwe and KiiRaŋgi, and [g] and [[Ø] in ɪCɪWʊʊŋgʊ. This is explored further in ***3.1.4.1*** below. Otherwise, the other varieties display regular occurrences before [-superclose] vowels. This feature in KiiRaŋgi and KeeMbuwe is an important classificatory cue, since it is only they which display such a pattern. It is one feature among several which suggests they descended from a common ancestor or had contact. On the other hand, [ɣ] as a voiced counterpart of [x] seems to result from the non-superclose vowel environment where the [+back] feature causes a friction in the velum, deleting the [+stop] feature of the *g. This seems a phonetic rather than a phonological reflex, since it was possible to substitute [g] for [ɣ] without any loss of meaning in KiBende and KɪRɪmi.

*3.1.2.17. *g/_i [+superclose]*

(a) [g] KiLooŋgo, KɪSukuma, KiDakama, KiKonooŋgo, KɪnɪLaamba, KɪKɪɪmbʊ
(b) [ɣ] KɪRɪmi
(c) [z] SiSiloombo, SiYoombe, KɪNyanyeembe, ɪCɪWʊʊŋgʊ
(d) [s] KiBende

Due to limited data with *g/_i [+superclose], SiGalagaanza, KeeMbuwe and KiiRaŋgi are not represented. The other members display a consistent pattern of either favouring Bantu Spirantization or not. SiSiloombo and SiYoombe become isolated from KiLooŋgo in that the later has [g] while they show [z], like KiNyanyeembe and ɪCɪWʊʊŋgʊ. While ɪCɪWʊʊŋgʊ is a regular Bantu Spirantization candidate, KiNyanyeembe may be due to areal influence from SiSiloombo/SiYoombe and not from KiBende since KiBende has [s] and devoices spirants regularly (Nurse 1988:59). Within Zone F, the patterns displayed here are good typological clues. Some affiliation is indeed displayed, and if ɪCɪWʊʊŋgʊ is removed as geographically distant, the four remaining ones suggest some areal-based distribution.

North Nyanza (EJ30), Western Highlands (DJ60) and Rutara (EJ10) have [z] too, hence pointing to SiSuumbwa as either a member or has been influenced heavily by them as neighbours.

*3.1.2.18. *g/_u [+superclose]*

(a) [g] GɪnaNtuzu, JinaKɪɪya, KiKonooŋgo, KɪnɪLaamba, KɪKɪɪmbʊ
(b) [v] SiSiloombo, SiYoombe, SiGalagaanza, ɪCɪWʊʊŋgʊ
(c) [f] KiBende
(d) [Ø] KɪRɪmi, KeeMbuwe
(e) [v/g] KiNyanyeembe

(f) [Ø/v] KiiRaŋgi
(g) [z] KiLooŋgo

The conclusions reached here may not be as valid as required since only two words were found in the *g/_u [+superclose] environment, *-jogu 'elephant' and *-gund- 'be high (rot) (of meat)'. Some varieties like KɪSukuma and KiDakama do not use *-jogu for 'elephant', and so only one word remained. The informants in KɪmunaSukuma and KiDakama did not respond to the word for 'be high', and so both slots became empty for these two varieties. For those who answered, however, the responses were consistent with the expected patterns observed in other cases of *g. For instance, KiBende [f], SiSiloombo [v], SiYoombe [v] and ɪCɪWʊʊŋgʊ [v] showed consistent Bantu Spirantization, while SiGalagaanza [v] followed SiSiloombo and SiYoombe. On the other hand, KiLooŋgo [z] became more like Rutara, and unlike SiSiloombo/SiYoombe with [v], which was more like Western Highlands like KiRundi, GiHa and KiHangaaza (DJ60), which are immediate neighbours of SiSuumbwa to its west.

A conspicuous case of double reflexes was displayed by KiNyanyeembe [v/g], showing that Bantu Spirantization is not well-established, as indicated in *3.2.1.1.14*. In fact, the SiSuumbwa influence may be posited here, whereby [v] is from SiSuumbwa, and [g] from KiNyamweezi. KiiRaŋgi's [Ø/v] alternation points to the same feature of absent or weak Bantu Spirantization since the default seems to be [Ø] rather than [v]. Section *3.2.* illustrates in some detail such cases of alternation and the type of words in which such processes occur.

Despite insufficient data, BS is indicated clearly in KiBende, SiSuumbwa and ICIWUUŋgU. The rest show none. KIRImi, KeeMbuwe and KiiRaŋgi show loss of PB *g in the superclose vowel environment, although no solid conclusions can be drawn because of limited data.

*3.1.2.19. *c/_V [-superclose]*

(a) [s] All, except KInILaamba-Central, KInIHaanzu, KIRImi
(b) [h] KIRImi, KInIHaanzu
(c) [s/ʃ] KInILaamba-Central

One important generalization which can be drawn from PB*c/_V [-superclose] is the status of KInIHaanzu, a dialect of KInILaamba, in relation to KIRImi. They both have [h] as the reflex of PB *c with non-high vowels. There are several cases where KInIHaanzu is more similar to KIRImi than it is to KInILaamba. This may have something to do with historical genetic affiliation since it is only KInILaamba and KIRImi which do not have a regular alternation pattern [s] in non-high environments of PB *c, like the rest of Zone F.

On the other hand, it is difficult to explain the alternation in KInILaamba-Central [s/ʃ][16]. It may be a generational question, or simply unknown rules at the moment leading to inconsistent alternations, as in ICIWUUŋgU where some younger informants had different qualities of sounds from the elders, who showed more conservative vowel productions

[16] This case is similar to the four Seuta languages (G23, G24, G31 and G34), where the three have /s/, while one, G23 (KiShambala), has /ʃ/ (Nurse, p.c. May 2000).

(Labroussi (1999:360-361)).

*3.1.2.20. *c/_i [+superclose]*

(a) [s] All, *except* GInaNtuzu, JinaKIIya, KiDakama, KiNyanyeembe, KInaʊshoola, KInIHaanzu
(b) [ʃ] KImunaSukuma, JinaKIIya, KiDakama, KInaʊshoola
(c) [h] KInIHaanzu
(d) [s (ʃ)] GInaNtuzu, KiNyanyeembe

*3.1.2.21. *c/_u [+superclose]*

(a) [s] All, except KInaʊshoola, KInIHaanzu, KIRImi
(b) [h] KInIHaanzu, KIRImi
(c) [ʃ] KInaʊshoola

Evidence for BS in the PB *c environment is not clear, first because of the limited data, and secondly, because of the overall distribution of the reflexes which favours /s/ generally before all vowels. This indicates that *c was not inherited from Proto Bantu by the Zone F languages because it is not attested in the group. Rather, /s/ is inherited from an intermediate, common proto language which is not Proto Bantu. The examples of KImunaSukuma, JinaKIIya, KiDakama, KInaʊshoola show /ʃ/ before superclose vowels. These are cases of probable recent palatalization, as a contrast to the [-superclose] vowel influence. However, the importance of palatalization seems marginal, since KInaʊshoola, for example, shows traces of /ʃ/ in all phonetic contexts. KISukuma has /s/ before PB *u, indicating a mixed situation with a likely non-BS status. A partial numerical distribution of the reflexes of PB *c is shown in *3.2.1.1.14* below when discussing SSN.

*3.1.2.22. *j /_V [-superclose]*

(a) [j] KIRImi, KIKIImbʊ, KiiRaŋgi, KeeMbuwe
(b) [z] KiLooŋgo, KISukuma, KINyamweezi, KInIHaanzu, ICIWʊʊŋgʊ
(c) [j/z] KInaʊshoola, KInILaamba-Central
(d) [z/zy] SiSiloombo, SiYoombe
(e) [s/sy] KiBende

The striking feature here is the isolation of KiBende by spirant devoicing as noted above. This feature is not shared by any other Zone F language.

*3.1.2.23. *j/_i [+superclose]* and **j/_u[+superclose]* [y] (All)

Data were inadequate in these environments. Out of the more than 1000 words used. only 26 contained *j, and out of those, none had *i, and only 2 had *u. Conclusions based on this sound would therefore be significantly misleading.

3.1.2.24. Explanation and interpretation of Bantu Spirantization in Zone F

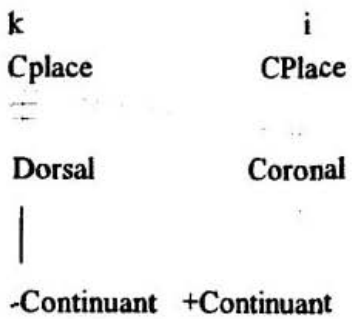
The analysis of BS in Zone F can be approached in two ways (a) either as a phonetic or phonological process whereby articulatory and perceptual factors play a role in sound change (b) contact situation where one variety transfers features to another variety. During the process of adopting and adapting the new features, the phonetic/phonological processes interact simultaneously with the contact situation or any other factor(s) as one complex whole. The separation of the results of interacting processes is done only for the sake of analysis since the two, contact and phonological change, can and do occur simultaneously.

3.1.2.24.1.Phonetic Phonological Explanation and interpretation of Bantu Spirantization in Zone F.

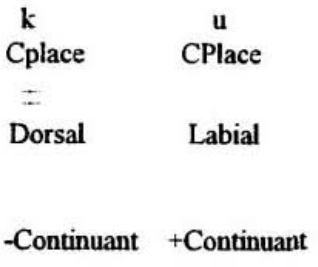
The feature geometry approach can be used to account for BS. Feature geometry treats Bantu Spirantization as a Consonant/Consonant (C/C) interaction where the superclose vowels are phonologically specified for the [+consonantal] feature which then spreads over other neighbouring segments in a patterned way and completely replaces the CPlace features of preceding stops (Zoll 1995:539). The process is largely governed by the phonotactics of a language. She states:

> ...the narrow stricture of the superclosed (*sic*) segments is directly responsible for these properties of mutation as well - in particular, that the superclosed segments have CPlace rather than VPlace features, in line with their narrow stricture, and thus are classified phonologically as [+consonantal]...Once Bantu mutation is properly understood as an interaction between consonantal segments, it is no longer surprising that the set of triggers has never broadened to include the other vowels.

(9) k → s



(10) k → f



(11) d → z

d	i
CPlace	CPlace
Coronal	Coronal
-Continuant	+Continuant

Represented graphically in (9), the /k/ loses its [+dorsal] features by being deleted by the CPlace feature of the superclose *i which spreads its [+coronal] and [+continuant] features, and changes /k/ to /s/, as in SiSuumbwa /lyoonsi/ < *-yoki 'smoke', or as in KiBende /-sisi/ < *-kidi- 'soot'. In KiBende, two prominent processes in the language occur in that word, BS which transforms *k into /s/ and spirant devoicing which changes *di > /zi/ into *di > /si/.

(12) d → d

d	i
CPlace	CPlace
Coronal	Coronal
-Continuant	+Continuant

The BS rule is powerful enough to account for the changes observed in spirantizing languages. For instance, with *u, the change of *k > f can be explained as the spreading of the [+Labial] and [+Consonantal] features of the *u to the *k. The two features then delete the CPlace node of the *k, resulting in /f/ as an assimilatory process. This can be represented as in (10), above.

On the other hand, such a rule assumes that the process will apply without exception in a given language like KɪSukuma. For instance, what is the interpretation of the in cases where there are double reflexes of *-dʊdi 'whistling' where KɪmunaSukuma has /shilʊji/, JinaKɪɪya /nʊli/ and SiGalagaanza has /mulʊzi/, respectively? The rule does not explain such

exceptions. However, one way of defending the feature geometry rule as a relevant and plausible explanation is the fact that in each language the rule applies differently in terms of which features are specified or not before the superclose vowels. The selective rule application also specifies which features are replaced in the adjacent stop, as illustrated in (11) as in KINyamweezi -gazi 'blood' < *-gadi 'blood'; in (12), as in KISukuma -dito 'heavy' < *-dito 'heavy'; in (13) as in JinaKIIya -biti 'hyena' < *-piti 'hyena'.

Due to these individual language differences, some phonotactic rules may apply in each case, either allowing or blocking some of the operations of the expected rule and its results.

On closer examination, the phonotactic explanation is not good enough for violating the BS rule, since, as in examples (12) and (13), any exception to the feature geometry account is likely to be a result of a vowel other than the superclose. Any violation or compliance with BS can also be due to a word borrowed into a language which has no BS, resulting in some words being affected by BS while others do not change.

(13) t → t

t	i
CPlace	CPlace
Coronal	Coronal
-Continuant	+Continuant

The enigma of double reflexes in some of the Zone F languages like SiSuumbwa, KISukuma, KINyamweezi and ICIWUUŋgU can be accounted for by the feature geometry account when borrowed words or sounds are involved. As noted in

3.1.1, *Tables 3.1* and *3.2* above on 7 vs 5 vowel systems, there is dominance of 7V and 5V in F25 and F34 respectively without definite BS. On the one hand, F34 did not undergo BS, although it shows a 5V system, as illustrated in 3.1.1 regarding vowel systems in Zone F[17]. The state of affairs where there is a reduction of vowels in descendant languages like KeeMbuwe and KiBende can be interpreted in two ways, among others. First, it can be a result of true BS, and secondly it may be due to vowel reduction not related to BS. The behaviour of KeeMbuwe and KiBende can shed some light in the patterns of double reflexes in SiSuumbwa, KISukuma, KINyamweezi and ICIWʊʊŋgʊ. At the beginning of Chapter 3 on vowel quality frequencies, F25 showed that it is a 7V language without any doubt, although other studies have also found that speaker variation was pronounced, with some speakers showing 7V, while others, especially from the young generation, had 5V (Labroussi 1999). One explanation given by Labroussi (1999) is BS in progress.

However, ongoing BS in F25 is an unlikely explanation because the mechanism does not suggest that it is internally motivated or adapted through adoption by borrowing. The major factor is likely bilingualism of the speakers, who are made conscious of using two codes

---

[17] However, Dempwolff (1912:15) records 9 vowels for KeeMbuwe rather than 5, as noted in 3.1.1 above. As a reminder, these 9 are i̯ (y), i̯ (y), e̯, e̯, a, o̯, o̯, u̯ (w), u̯. In addition, Guthrie (1967-71) does not give any vowel details for either KiiRaŋgi (F33) or KeeMbuwe (F34), although he records 7 vowels for KiToŋgwe ((F11), from his Tongwe Group which includes KiBende (F12)). These 7 are the regular vowels found in 7V Bantu languages like KISukuma or KIKIImbʊ, from Proto Bantu*j, i, e, a, o, u, ʉ, the first and last being the superclose. These superclose vowels show clear BS even in KiToŋgwe (Guthrie (1971:47, vol.2)

and/or two phonological systems, F25 and KiSwahili, the national language. If the process were internal to the language, there would be no widespread exceptions for the superclose /i/ and /u/ being only occasionally specified for [+consonantal, +continuant]. This can be accounted for by the F25-Kiswahili bilingual situation the younger generation are exposed to, compared to their elders, who are likely to be less bilingual. Because of bilingualism, a much more plausible account is imitation borrowing without any progression to adaptation. Imitation borrowing occurs when the linguistic rules of the loan words from the source language are not learnt properly by the recipient language speakers, and therefore reproduction is not perfect. Adaptation borrowing in speakers occurs when assimilation into the recipient language follows the rules of the source language, resulting in a perfect blend of loan words so that the origin of the word in the source or recipient language is blurred (Coetsem (1988:7)). By imitation or adaptation, it is possible to store in language a faithful transmission of loan words and culture in general as non-material artefacts of a speech community. By their behaviour, these loans can then be distinguished from inherited vocabulary or other phonological processes like BS.

When there are double reflexes therefore, a language is either BS, or it is not. If it is not, then it has been heavily influenced by a BS language. This semblance of BS in a language is a result of a natural phonological process of assimilation helped by borrowing due to proximity to or being dominated by a full BS language. In the case of ɪCɪWʊʊŋgʊ, such a dominant language is likely to be KiSwahili, which is a national language and a medium of

instruction in all schools. With the policy of universal education in the 1970s and 1980s in Tanzania, all young speakers in all speech communities in the whole country who had the chance of going to school were exposed to the prestigious BS language, KiSwahili. These included ɪCɪWʊʊŋgʊ's neighbours like M11, M25, and M31 which show traces of BS, but with 7V, a pattern obtaining in F21 and F22 as well. In addition, all Zone G languages have BS[18]. This indicates that the pressure of KiSwahili, a Zone G language, is enormous, although its influence is only recent, especially when young informants give data. Other BS languages exert their influence in other contexts, as in DJ60 or EJ10/20/30 on their neighbours. Since BS occurs in the same words because the languages affected are all Bantu, then it is easy to borrow such words when the source language is perceived to be of higher status at that time. But since there is no internal motivation to maintain the momentum towards full adaptation, the 7V also remains as a separate system. This becomes consonant with the F21, F22 and F25 situation where the languages appear to have undergone partial BS because of retaining some words without BS, and having a 7V system, although in fact this is only imitation which is not internalized by and generalized into the system. For instance, M32 (CiNdali) shows patterns of heavy interference by other languages like KiSwahili, resulting in partial BS but full-fledged 5V, although its nearest relative, M31, displays the same partial BS but with full 7V. Labroussi (1999) offers a good explanation of this inconsistency for the Corridor languages and which is relevant to Zone F generally. In

[18] In fact, Nurse estimates that all Zone G languages have had BS for 1000-2000 years, long before KiSwahili influence (p.c. 13th February 2001)

both of the Zone M30 cases, it is likely but not proved by any study, that only imitation borrowing occurs rather than BS adaptation. As Labroussi (1999:374) aptly points out, 7 > 5 occurs independently of BS, although on the other hand, BS is necessarily followed by 5V. In other words, F34 has 7 > 5 as an independent vowel reduction process not associated with BS, whereas F10 and F23 have 5V because of BS.

On the other end of the spectrum F24, F31 and F32 have neither 7 > 5, BS nor any significant loan words with BS from their neighbours, indicating that, apart from being distant from F23, and to some extent from F10, they did not share any immediate historical path to make such influences possible.

For its part, KeeMbuwe (F34) has no BS, but shows strongly that it has 5V, as revealed in *Tables 3.1.* and *3.2.* Such vowel reduction may be due to heavy recent borrowing, probably from Iraqw or KiSwahili, rather than internal change, since there are few [ɪ] and [ʊ] remnants which reveal some underlying 7V heritage[19]. F34 is a language surrounded by non-Bantu languages which are 5V. Borrowing heavily from them is expected, facilitating the adaptation of new features into its own phonological system. KiiRaŋgi (F33), a close relative

[19] The rate of change from the 9 or 7 vowels observed by Dempwolff (1912) to 5 vowels in 1999 may be unusually speedy, unless they are phonetic or are due to the impact of a dominant language like KiSwahili which has been playing a major role in schools in recent years. In schools, the crop of young informants is likely to be even more susceptible to conforming to a language of wider communication in a multilingual context, especially in speech communities whose speakers number only a few thousands or less.

of F34, shows neither BS nor 5V although neighbouring languages like CiGogo or Seuta (and Ruvu in general) are BS and 5V.

This further implies that any traces of BS in Zone F outside F10 and F23 are either borrowed, or that they are not even BS. Rather, the traces which appear to be BS may in fact be regular palatalization, which tends to occur whenever a high front vowel is adjacent to a plosive, as a general assimilatory process of language. BS as a specific assimilatory process in Bantu does not allow for exceptions if it is present in a language. In KISukuma and KINyamweezi, for instance, some words do sometimes undergo BS, while others do not. Taking off from Labroussi's (1999) analysis and conclusions, the situation in KISukuma and KINyamweezi suggests strongly that there is a mix of two assimilatory processes: Bantu specific palatalization (BS) and general palatalization. This is the type of mix that occurs occasionally in KISukuma/KINyamweezi and other 7V languages. BS as a specific form of palatalization is associated with strict 7 > 5, while general palatalization does not affect 7V systems. These palatalization patterns are described by Labroussi (1999) as partial spirantization since there are many exceptions, as in the case of CiNdali and Ciŋgonde, among others. Such palatalization is not Bantu Spirantization[20] (BS) because BS is unlikely to accommodate such exceptions. The cases described by Labroussi are very similar with

[20] Sometimes, 'spirantization' is used to mean 'palatalization' or 'affrication', and sometimes restricted to BS only. In the case of Labroussi (1999), she refers specifically to BS, although the processes in the languages she describes suggest general palatalization, a process which is supported by the many exceptions in the same contexts.

the Zone F situation where there are fully-fledged BS with 5V languages like KiBende and SiSuumbwa. On the other hand, there is a group of languages like KɪSukuma, KɪNyamweezi and ɪCɪWʊʊŋgʊ which behave anomalously because of mixing features from different phonological processes. Labroussi (1999:375) offers an insightful explanation on this anomalous situation by advancing this idea of structural mixing. She describes the anomaly as abnormal, indicating that the source may lie in the examination of the sociolinguistic and historical networks between different linguistic groups. Such networks might have resulted in 'structural mixing' of two or more languages within one recipient language, as in the case of F21, F22 and F25. Such a situation of BS with 7V is also found in G65 (KiKiŋga), M11 (iCiPimbwe), M25 (iʃiSafwa), N11 (CiManda), P13 (KiMatumbi). Schadeberg (1995) analyzes this situation in detail, selecting languages which represent all Bantu zones. See also Kahigi (1987, 1988, 1995) on the processes of Proto Bantu stop weakening.

Zoll's feature geometry approach is powerful and elegant enough to capture what goes on in Bantu Spirantization. Zoll's approach also supports Labroussi (1999:363-365) who views BS as the natural effect of tense high vowels on preceding consonants which become phonological, and then the changes are morphologized in inflections, later regularized in derivations as a permanent change.

Based on the phonetic/phonological approach, BS and its traces in Zone F can be interpreted in the following ways. First, those languages with traces of BS with 7V retention might be

considered cases of historical palatalization only as an internal innovation. In this category can be grouped varieties of KɪSukuma and KɪNyamweezi. Secondly, there are those languages in which the Proto Bantu plosives underwent lenition generally, starting in an intervocalic environment and then by analogy regularized to all the occurrences. In this group are languages like KɪRɪmi and KiiRangi where there was a systematic change of plosives with 7V retention without Bantu Spirantization. Thirdly, in some languages, the plosives changed into corresponding fricatives without Bantu Spirantization, but then 7V became 5V by processes other than phonetic, as explained below under contact situations. This is the case of KeeMbuwe. Fourthly, it is unlikely that a language underwent the regular processes of weakening, with Bantu Spirantization, but then retained the 7V quite firmly, like ɪCɪWʊʊŋgʊ. With regard to 7V vs 5V in ɪCɪWʊʊŋgʊ, Labroussi (1999:375) is quite clear that it is 7V, although some young speakers have 5V. However, such a system of spirantization with 7V she calls abnormal, a situation found in ɪCɪWʊʊŋgʊ and Fipa-Sukuma as an instance of structural mixing referrred to above (Labroussi: ibid). Fifthly, the change resulted in Bantu Spirantization and a 5V system, as in the case of SiSuumbwa and KiBende. And lastly, there are those languages which changed little from Proto Bantu, like KɪKɪɪmbʊ and KɪnɪLaamba, showing neither traces of BS nor 5V. These linguistic groupings in Zone F can be summarized in (14) as one way of classifying these varieties based on Bantu Spirantization:

(14) Plosives, 7 > 5 and BS in Zone F

Process ☛ Languages ↓	7V	5V	BS	PAL[21]	Other lenition
KɪKɪɪmbʊ, KɪnɪLaamba	+	-	-	-	-
KɪRɪmi, KiiRangi	+	-	-	-	+
ɪCɪWʊʊŋgʊ	+	-	+?	-	-
KɪSukuma, KɪNyamweezi	+	-	-	+	-
KeeMbuwe	-	+	-	-	+
SiSuumbwa, KiBende	-	+	+	-	+

Due to contact, the features of these various groupings can diffuse to their neighbours and cause such phenomena as double reflexes. For instance, words with BS from SiSuumbwa or KiBende can spread to other languages, while the non-BS languages can also donate those non-BS words to SiSuumbwa and KiBende. A few such words are found in SiSuumbwa, as shown in 3.2 below.

3.1.2.24.2 The Contact Model Explanation and interpretation of Bantu Spirantization in Zone F.

Apart from the purely phonetic and phonological explanation of Bantu Spirantization, the process can also be interpreted in sociolinguistic terms. This refers to language contact as a social dimension of language where people of one language adopt and adapt aspects of another language into their own. The natural phonetic and phonological environment becomes only one conditioning factor. After borrowing a few words with BS, the same

[21] PAL = palatalization, as separate from BS

phonetic environment begins to behave in two ways, BS and non-BS. Double reflexes result with time. Multilingualism due to areal contiguity in many of the Bantu languages plays a big role here where BS can spread even further (Schadeberg 1995:82; Nurse 1999:26). Some of these languages therefore acquire BS partially, resulting in double reflexes when the process fails to be adapted; if acquired in full, there is resulting language shift, from a 7V language to a 5V with BS. The mechanism of this causal relationship between BS and 7 > 5 has not yet been fully explored as far I am aware. But, based on observation, BS is followed by 7 > 5 generally because of the phonological instability created by BS (Schadeberg 1995:78). This causal connection Labroussi (1999:367) calls phonological enrichment in which BS introduces new phonemes (fricatives) in a language whereby the vowel system is restructured by vowel reduction as a counterbalancing process. This explanation is adequate, although a systematic study can be undertaken to study the causal relationship in more detail.

The contact model approach is preferable since it simultaneously includes both the phonetic/phonological and sociolinguistic perspectives. Two observations can be made of this sociolinguistic approach: behaviour of loanwords and the capacity of various speech communities to absorb speakers from other languages.

3.1.2.24.2.1. The Contact Models: Loan words.

Loanwords with BS features, especially in KINyamweezi and KISukuma where Proto Bantu consonants show two reflexes, are suspected as major sources of apparent BS. The situation

is similar to that of KiPare (Casu) where extraneous sounds which go against expected patterns in the language are found, creating a messy picture[22]. A few cases of BS are found in KIKIImbʊ North in words like kʊ-fuma 'to go out' < *-pum- 'go out'. This word displays BS, a process which is generally absent in that language. A feasible explanation lies in contact with neighbouring KINyamweezi which has some Bantu Spirantization, also not native in the language. It is mainly due to contact with other Bantu Spirantization languages that KIKIImbʊ North would have a word with such a form. The prime suspect is likely to be SiSuumbwa or KiBende because it is synchronically the nearest (although modern language contiguity says nothing about ancient affiliations and neighbourliness between languages). Irregularities due to contact are a common occurrence, and in this case, we might ask ourselves: Is SiSuumbwa a real candidate for influencing KISukuma and KINyamweezi, which in turn might have influenced KIKIImbʊ? What about other languages which we do not know about now because they are at present geographically distant from KISukuma, KINyamweezi or KIKIImbʊ speech communities? Regularity in language is normal, and any irregularities as marked features should be explained. For instance, in cases of double reflexes, should ongoing change be posited? If such a position is suggested, then one word should allow two different ways of pronunciation to mean the same thing. But that is not the case in the double reflexes found in KINyamweezi and KISukuma. There is definitely no evidence of ongoing change. In southern KiSwahili, for example, *mwivi* and *mweufi* on the one hand, and northern KiSwahili *mwizi* and *mweusi* 'thief' and 'black' respectively, on the

[22] Nurse, personal communication, March 2000

other, are dialectal and they do not coexist in one dialect. In their conversations, Bryan revealed to Nurse that in the 1930s *mwivi* and *mwizi* were in fact both common in Dar Es Salaam[23].

3.1.2.24.2.2. The Contact Models: capacity for absorbing newcomers and demographics

In the not so distant past, both KISukuma and KINyamweezi speech communities showed a tendency to absorb speakers of other languages and swell their numbers (Masele 1997). That also can have a disturbing/modifying influence on the host languages. If that fact is acknowledged, then the following questions may have definite answers if the evidence is collected: Why are some of the reflexes irregular in some varieties while other varieties are relatively stable? Why do some members of Zone F languages show consistency of pattern while the others do not?

Demographic changes is one of the best scenarios. According to the preceding sections, SiSuumbwa underwent Bantu Spirantization. KISukuma and KINyamweezi did not, except that they borrowed lexical items which had BS. This explains the inconsistent reflexes. For instance, in the *d reflexes, one would expect only /l/, but there are /j/ (in KISukuma) and /zy/ (KINyamweezi) in causatives. This can be said of /k/ with the /f/ and /k/ reflexes. There is also a mixed situation with regard to *b. Where do these unexpected reflexes come from? One answer might be the languages coming in contact with the affected languages. Which

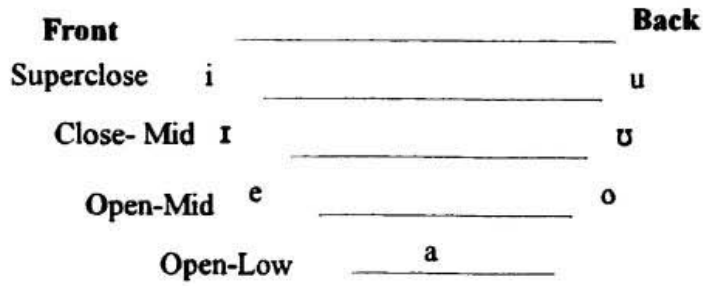
[23] Nurse, p.c. May 2000.

ones, is a perennial question if the current neighbours are excluded.

3.1.2.24.3. Synthesis: Bantu Spirantization in Zone F

In phonetic and phonological terms, a more than ternary division of tongue height allows for Zoll's proposal for a feature [± cons] for /i/ and /u/ (i.e. Guthrie's /ị/ and /ụ/). The ternary characterization of vowels as being only high, mid and low excludes finer vowel heights, at least in analysis. A four-part division allows for more flexibility: superclose (*i, *u (or *ị and *ụ), close or close-mid (*ɪ, *ʊ), open-mid (*e, *o) and low (*a), as suggested in (15). In normal circumstances the /i/ and /u/ are underspecified for features [+superclose] and [+consonantal] where /i/ and /u/ are not high enough to trigger spirantization. In other words, in languages without BS, the superclose vowels are not specified for [+consonantal], although the division is quartery (four-part). In SiSuumbwa and KiBende the superclose vowels had the [+cons] feature specified, and they triggered Bantu Spirantization.

(15) Four-part height of Proto Bantu vowels



BS due to contact applies only in those few loan words with BS, or those regularized due to the contact environment. The mechanism of why in some languages the [+cons] feature is present, with the potential of triggering BS, and in others it is not, is a matter for further investigation.

On the other hand, the contact model also accounts for those double reflexes which Harris and Lindsay (1995:69) see as an arrested process. Historical progression through various stages on a particular path is sometimes arrested at some point, with the result that two or more stages on a particular trajectory are retained within the same phonological system as stable alternations or distributional variants. Although this explanation is good at first sight, its major shortcoming is its inability to provide evidence for the arrest of a certain change in progress and the reasons for that. For instance, in the case of ɪCɪWʊʊŋgʊ, BS operates only in some words but not in others. The major question remains: why some stages are arrested

in some words but not in others? This model appears incorrect, since the arrested stages are most likely loanwords which appear as irregular or double reflexes in a language, as in SSN. In such occurrences then, no full Bantu Spirantization can be found. The case of KiBende is instructive: most of the reflexes are complete, which is suggestive of non-interference from other languages because of being isolated physically (in the past) from the non-BS languages. Where there are double reflexes, the influence of neighbouring BS varieties causes mixed forms to appear. This can be said of SiSuumbwa in relation to KINyamweezi and KISukuma, and to some extent KIKIImbʊ North. Due to the impact of KINyamweezi on KIKIImbʊ North, the borrowed BS words might have spread even farther, since KINyamweezi was numerically stronger, and was also until very recently perceived as socially and culturally, prestigious[24].

To summarize, Bantu Spirantization in Zone F can be viewed as a three stage process. The first stage refers to languages which did not undergo BS. The second stage involved the adoption of words with Bantu Spirantization. However, the adoption and adaption process

---

[24] In many speech communities in Tanzania, and indeed, in those of the whole world, there may be groups perceived to possess "superior" attributes at a certain point in their historico-cultural contact with others. Because of that, they command special respect so much so that other groups feel relatively inferior to those groups and reject their own assets and attributes and glorify others'. This was common especially during pre-independence days when ethnic or "tribal" consciousness was created. The post-independence period, starting from the mid-1960s with the policies of socialism, levelled out most of the ethnically-based differences, and respect for everybody was restored, and different sets of attributes not based on ethnic identity emerged. Examples for certain groups in society being overly privileged and protected can be multiplied in any culture.

was not complete since the native words were already well formed phonotactically, and it was not necessary to influence them. Some fricatives replaced stops. This is explored in more detail in section **3.2** and represented in (16).

(16) BS and 7 > 5

Stage	Vowel status	Consonants	'arrive, measure'	Example languages
I	7 (incl. ɪ & ʊ)	stops	-pika/-pɪma	All Zone F
II	7 (incl. ɪ & ʊ)	stops, fricatives	-pika/-pɪma	All Zone F, except F10, F23[25]
III	5 (no ɪ & ʊ)	stops, fricatives	-fika/pima	F10, F23, G42[26], with BS

The third stage occurred in languages like SiSuumbwa and KiBende. This stage of BS maps a one-to-one relation between superclose vowels and Bantu Spirantization. With such a rule, no exceptions are expected, unless the languages acquire loanwords. As neighbours, languages like SiSuumbwa (F23) had an impact on languages like KɪNyamweezi and KɪSukuma to some varying degrees, while the more distant ones received little or no influence. This is illustrated in (16).

As a classificatory tool, Bantu Spirantization only succeeds in isolating SiSuumbwa as a once powerful and influential language which interacted with and was reciprocally influenced by

[25] Keembuwe and ɪCɪWʊʊŋgʊ are borderline, with 5V without BS (F34), and 7V with some BS acquired through borrowing (F25). KɪSukuma and KɪNyamweezi are in this category too, since they mix features from borrowed items, having 7V, with BS in loans.

[26] F10 (KiBende), F23 (SiSuumbwa), G42 (KiSwahili)

KɪSukuma and KɪNyamweezi. In Zone F, SiSuumbwa and KiBende are the only languages with true BS with 5V. Based on BS alone, Zone F's unity is questioned.

3.1.3. Dahl's Law

"When two successive syllables [in KɪNyamweezi] each begin with an aspirate, the first of these loses its aspiration and becomes voiced", Meinhof (1932:181), had said, quoting Dahl (1915) who had observed KɪNyamweezi lexemes and after whom the law is named, as in (17):

(17) -gatɪ < PB *-katɪ 'in the middle'
-datʊ < PB *-tatʊ 'three'
-βɪta < PB *-pɪt- 'pass, surpass'
-sagʊla < PB *-cakʊd- 'comb (hair)' (JinaKɪɪya)[27].

The rule can be restated in the form shown in (18).

(18) Original Dahl's Law: $C_{[-stop, -voice]}V \rightarrow C_{[-voice]}V \; / \; \_\_\_[-stop, -voice]\, VC_{[-stop, -voice]}$

In KɪNyamweezi, the rule applies within a single di- or poly-syllabic morpheme. Other languages innovate the law differently.

---

[27] While the original Dahl's Law in KɪNyamweezi might have worked by voicing the first voiceless stop of the first syllable when two such stops are consecutive, its mechanism is realized differently in different language varieties, as in JinaKɪɪya.

Davy and Nurse (1982:157) indicate that the phenomenon shows traces in many languages of East Africa, and is not found outside the area, based on present evidence (Nurse and Hinnebusch 1993:215). Davy and Nurse (op. cit) isolate four possibilities of the process, implying that, although it is Dahl's Law, its implementation may depend largely on the phonotactics of a language. They go on to provide example languages and their dissimilation patterns, where possible[28]: (a) petrified in some, leaving only traces in stems (as in E74, E55, E56, G22, and EJ30, with traces in one or more of *p, *t, *k); (b) affecting consonants of prefixes and stems actively; (c) affecting several obstruents (as in E51, E52, E53 and EJ40); and (d) affecting only stops, predominantly /k/.

For instance, Dahl's Law in KinyaRwanda, as a geographically close neighbour to Zone F languages, particularly KiSukuma and KiNyamweezi, dissimilates the voiceless consonant of the prefix morphemes by voicing when the first consonant of the following root in a stem is voiceless, as illustrated in (19) (from Kimenyi 1979:65-71). The consonant may or may not be a stop. Because the rule in KinyaRwanda applies only across morpheme boundaries rather than within a single morpheme, the following affixes are examples of such morphemes that trigger the process: -ku- 'infinitive 'to'', 'you (singular)'; -ka- 'diminutive (class 12)', 'narrative or consecutive tense'; -ki- ''not yet' aspect', 'class 7 marker'; -tu- 'we, us'; -ta- 'negative marker':

---

[28] For an in-depth analysis and examples, see Bennett (1967), Davy and Nurse (1982:157-195).

(19) Dahl's Law in KinyaRwanda (data from Kimenyi 1979)

ku-βona 'to see'	a-*ka*-gaβo 'a small man'	i-*ki*-gori 'maize'
ku-mira 'to swallow'	a-*ka*-zu 'a small house'	tu-*ki*-rya 'we eat it'
gu-soma 'to read'	a-*ga*-seka 'and then he smiles'	tu-*gi*-soma 'we read it'
gu-kina 'to dance	a-*ga*-ʃima 'and then he thanks'	i-*gi*-seβe 'wound'

u-*tu*-mesa 'who doesn't wash'	*tu*-bura 'we miss'
u-*tu*-gona 'who doesn't snore'	a-*tu*-rinda 'he protects us'
u-*du*-saβa 'who doesn't ask'	*du*-teka 'we cook'
u-*du*-hinga 'who doesn't cultivate'	a-*du*-tuma 'he sends us'

In Zone F generally, the data show that Dahl's Law is active today in KINyamweezi and KISukuma only. In the other languages, it does not exist except in loanwords, in those of unknown origin or in sporadic processes with a semblance of the law (See *Appendix 3*). In extensive cases of borrowing due to contact or ambiguous status of Dahl's Law as in KINyanyeembe, KIKonooŋgo and SiGalagaanza, a general explanation is given to account for the unexpected skewing of the results. In these three varieties, Dahl's Law is found in less than 50% of the sampled items. A figure of at least 78% words with Dahl's Law suggests that a language variety has active Dahl's Law, while a count of less than 48% raises some doubts, sometimes serious, about its linguistic group membership. The results are shown in *Table 3.6*

Table 3.6. Status of Dahl's Law in Zone F individual varieties

Language variety	*Total number of words*				
	All used	*+DL*	*% DL*	*- DL*	*% -DL*
SiSiloombo	38	4	11	34	89
SiYoombe	41	5	12	36	88
KiLooŋgo	34	10	29	24	71
KɪmunaSukuma	44	38	86	6	14
GɪnaNtuzu	45	39	87	6	13
JinaKɪɪya	51	49	96	2	4
KɪDakama	41	32	78	9	22
KɪNyanyeembe	41	18	44	23	56
KɪKonooŋgo	44	21	48	23	52
SiGalagaanza	42	12	29	30	71
KiBende	33	0	0	33	100
KɪnaUshoola	37	0	0	37	100
KɪnɪLaamba C	33	0	0	33	100
KɪnɪHaanzu	38	0	0	38	100
GɪRwaana	36	0	0	36	100
GiAhi	42	1	2	41	98
ɣɪnyaMunyiŋanyi	43	1	2	42	98
KɪKɪɪmbʊ North	47	4	9	43	91
KɪKɪɪmbʊ South	43	1	2	42	98
ɪCɪWʊʊŋgʊ	41	0	0	41	100
KiiRaŋgi	41	1	2	40	98
KeeMbuwe	40	2	5	38	95

Based on the different numerical patterns of the law displayed by the various language varieties, some linguistic groups can be suggested. In order to obtain these groupings based on Dahl's Law, five steps were followed. First, all words containing a consecutive sequence of syllables with voiceless stop consonants were identified by examining the Proto Bantu list

of 1036 items, word by word. The aim was to include all DL words to see how they behaved in the various varieties. However, a few were not usable for various reasons. For instance, it was discovered that some were not directly inherited from Proto Bantu, while the others were formed exclusively by syllables with PB *c instead of those words having at least one voiceless stop from /p, t, k/. In many Bantu languages PB *c is realized as /s/. In all language varieties, except JinaKIIya, /s/ does not trigger Dahl's Law. Such excluded words, included *-cʊpa 'calabash bottle' (cf KiSwahili cupa, JinaKIIya nsʊha 'calabash', jʊba 'bottle'); *-cace/cacI 'spark'. The second step involved the assembly of a unified list of the cognate words for each variety. Fifty eight (58) were found usable, constituting 6% of the whole list. Thirdly, the frequencies of either Dahl's Law or its absence were made, and their totals computed. Fourthly, the words which were not cognates or where the informant did not supply a word, were sorted out and excluded from the sample for each variety so that only words with responses were counted to see Dahl's Law words. And finally, a percentage for each language was computed from the final selected words that remained in each variety. The results of *Table 3.6* indicating these groups are summarized in *Table 3.7*.

Table 3.7. Dahl's Law in Zone F and linguistic grouping

Items with Dahl's Law, out of 58 words	*Number (#) and names Language varieties*		*Dahl's Law Status*
	#	Examples	
0% -12%	14	SiSiloombo, SiYoombe, GIRwana, GiAhi, GhInyamunyiŋanyi, KInaUshoola, KInILaamba, KInIhaanzu, KiIraŋgi, KIKIImbʊ North, KIKIImbʊ South, KiBende, KeeMbuwe, ICIWʊʊŋgʊ	-
29%	2	SiGalagaanza, KiLooŋgo	?
44 - 48%	2	KINyanyeembe, KIKonooŋgo	?
More than 78%	4	KImunaSukuma, GInaNtuzu, JinaKIIya, KIDakama,	+

As *Table 3.7* shows, four divisions can be observed in Zone F with regard to Dahl's Law. Firstly, out of the 22 varieties, 14 of them show no or very few traces of Dahl's Law, (zero to 5 out of the 58 words). Most Zone F languages fall into this category. Secondly, two varieties have Dahl's Law in 10 and 12 words respectively, out of the 58. Thirdly, two others show 18 and 21 words with Dahl's Law respectively. And lastly, 4 dialects have more than 30 words undergoing Dahl's Law.

From the list, it is apparent that languages or their varieties without Dahl's Law include the two varieties of SiSuumbwa, KiBende, KIRImi, KInILaamba, KIKIImbʊ, KiiRaŋgi, ICIWʊʊŋgʊ, and KeeMbuwe, while the Dahl's Law languages are KISukuma and some

dialects of KINyamweezi. For KINyamweezi however, there are reservations with regard to KINyanyeembe and KIKonooŋgo on the one hand, and SiGalagaanza on the other. The frequencies of Dahl's Law and non-Dahl's Law items in these varieties do not give a conclusive picture, unless other criteria of classification are used. KINyanyeembe has 18 words or only 44% out of 41 while KIKonooŋgo has 21 out of 44, or only 48%. These two figures show that more than half of the words do not undergo Dahl's Law as they should. For SiGalagaanza, Dahl's Law words are even less, at 12 only from 42 words, or 29% only. That figure for SiGalagaanza matches closely with that for KiLooŋgo, at 10 words out of 34, or 29%.

While KINyanyeembe and KIKonooŋgo may be regarded as heavily influenced by languages without Dahl's Law, SiGalagaanza and KiLooŋgo have close figures suggesting something more than only influence from another language. This suggests membership in languages other than those they are purported to belong. In other words, SiGalagaanza may not be a part of KINyamweezi, just as KiLooŋgo seems to belong elsewhere than with SiSuumbwa. This is further explored in **3.2.2** below.

Using Dahl's Law alone, the classification of the Zone F languages emphasizes the following three points with regard to groupings. Firstly, SiSiloombo and SiYoombe exclude KiLooŋgo, establishing them as the centre of SiSuumbwa. KiLooŋgo, while it has some affinities with SiSuumbwa, creates a class of its own independent of SiSuumbwa, suggesting the possibility

of a separate history punctuated by another period of long contact with SiSuumbwa. Some possible close affinity with SiGalagaanza is also suggested.

Secondly, the core of KINyamweezi is composed of two dialects: KINyanyeembe and KIKonoongo, since KIDakama shows a closer affinity to KISukuma than to the KINyamweezi group, while SiGalagaanza displays an affinity to other peripheral languages. This behaviour seems to be the situation of the "centre" and "periphery" of an entity. The periphery 'protects' the centre from foreign influence by acting as a shell. The periphery is influenced because of its protective role by absorbing the foreign influences due to its location at the fringes of the core. This especially applies to languages or varieties which have geographically and socially porous borders allowing other linguistic groups to come in easily. SiGalagaanza borders other languages of Zone DJ and EJ with easy access both ways, while KiLoongo is surrounded by both EJ and F. The KISukuma varieties on the other hand are protected in the east by the swampy Wembere area, by Lake Victoria in the north, and in the west, in the not recent past by dense forests, and hence their closer affinity in terms of Dahl's Law with 86% for KImunaSukuma, 87% for GInaNtuzu and 96% for JinaKIIya. Their buffer to the south, KIDakama, at 78%, has the second highest frequency of Dahl's Law after the KISukuma varieties. KISukuma's status suggests relatively undisturbed, linguistically impervious borders, especially in the past. The three varieties of KISukuma constitute a core group of Dahl's Law, although finer details isolate JinaKIIya as a variety developing along a separate route from some distance in the past.

Thirdly, the rest of the Zone F languages constitute another negative grouping. But since this larger grouping is not homogeneous by other criteria, the separate sub-groups in it suggest independent development, as explored in the conclusion to this chapter.

Since Dahl's Law is largely confined to the target languages only of Zone F, namely, KISukuma, parts of KINyamweezi and SiSuumbwa, a discussion of the mechanism of this law is detailed in **3.2.2**. below.

Table 3.8 Dahl's Law outside KISukuma, KINyamweezi and SiSuumbwa

Word	*Found in*	*Possible source*	*Explanation (lexeme) in source*
i-ɣufa < *-kupa 'bone'	GiAhi	Zone EJ?	-gufa[29]
ʊ-bɪha < *-pic- 'hide'	ɣɪnyaMunyiŋanyi	?	?
-visa <*-pic- 'hide'	KiiRaŋgi, KeeMbuwe	CiGogo? KiDaβida?	-visa?
kʊ-βisa < *-pic- 'hide'	KIKIImbʊ North	KINyamweezi < KISukuma	< kʊ-βisa
i-dooke <*-tooke 'banana'	KIKIImbʊ, North and South	KINyamweezi < KISukuma	< i-dooke
-bʊʊhu < *-pʊʊp- 'light (in weight)	KIKIImbʊ North	KINyamweezi < KimunaSukuma < SiSuumbwa	< -bʊʊhu
i-gʊba <*-kʊpa 'tick'	KIKIImbʊ North	?	?
ma-basa <-paca 'twin'	KeeMbuwe	?	?

[29] In Zone EJ languages like oRuHaya, oLuNyaŋkore, RuKereβe and LuGanda, the reflex of *-kupa 'bone' is either -gufwa or -gufa, and some KIRImi speakers are said to have come from around those areas, like Ukerewe Island in Lake Victoria (Jellicoe 1969:3, *Tanzania Notes and Records*).

For the few frequencies obtained in other varieties, an explanation is given in *Table 3.8*. As can be observed, the words are either loans, or the origin of the reflex is not clear.

3.1.4 Other processes

For classification purposes, the preceding three features, 7 > 5, Bantu Spirantization and Dahl's Law are the most important, as a focus for this study. Other phonological processes like Meinhof's Law are not central in Zone F as a whole and therefore they are not discussed. In addition, not enough data are available for their fair treatment. The following processes are also not significant enough for diagnostic classification since they are isolated in a few individual languages only. However, they deserve some mention because they can shed crucial light in the finer sub-classification within the zone.

*3.1.4.1 Lenition of PB*g*

The process of lenition of *g is observed in KIRImi where it becomes /ɣ/. In this language, all PB stops (except partly /k/), weaken as part of a general process. In ICIWUUŋgU, Keembuwe and KiiRaŋgi, it becomes a fricative or glide like /y/ or /w/[30] respectively. In Keembuwe and KiiRaŋgi especially, it is lost altogether in the majority of cases, as illustrated in (20)

[30] /w/ and /y/ may only be spelling devices rather than being phonemic, indicating that they represent no or zero phoneme /Ø/.

(20)

Variety ☞ Proto-Bantu ⇓	*KIRImi*	*KiiRaŋgi*	*KeeMbuwe*	*ICIWUUŋgU*
*-goŋgo 'back'	mUɣooŋgo	mwooŋgo	mooŋxo	mugooŋgo
*-dog- 'bewitch'	-roɣa, -loɣa	-lowa	–lova	-lowa
*-jogu 'elephant'	ɲjou (ɲjoɣu)	ɲjou	ɲjou	Inzovu
*-tUIga 'giraffe'	ntI(I)ɣa	ntwIIya	ntooya	ndwiiya
*-teg- 'set trap'	–ReeɣA (-tega)	-tea	-teya	-teeya
*-bogo 'buffalo'	mbo(o)ɣo	mboo	mboo	Imbogo

In ICIWUUŋgU, the mutation of *g to a fricative appears to be blocked mainly by /o/ or /u/. Otherwise, it regularly becomes /Ø/ in all three languages, except KIRImi where it is [ɣ]. Because of that exception in ICIWUUŋgU and KIRImi, different histories are suggested for KIRImi, ICIWUUŋgU and KeeMbuwe/KiiRaŋgi[31]. This might be explained as a diffused feature or as a feature inherited by the four from a common ancestor. The suggestion of a common ancestor needs additional support.

*3.1.4.2. Lenition of *k (*k → x)*

This is a phonetic process which occurs mainly in KIKIImbU and KIRImi. The change is more consistent in KIKIImbU than it is in KIRImi. As a phonetic phenomenon, lenition of *k to [x] may not be a significant classificatory criterion, although the question is, why not

[31] For *g loss in other Bantu languages, especially KiSwahili, see Nurse and Hinnebusch (1993)

in the other languages? Such a shared articulation habit in two related and adjacent speech communities suggests either a feature inherited from a common ancestor, areal diffusion or contact with an earlier, perhaps non-Bantu community.

(21)

Variety ☞ Proto Bantu ⇓	KIKIImbʊ	KIRImi
*-teek- 'cook'	-teexa	-Reexa[32]
*-kada 'embers	-xala	-xa(l)a
*-kaŋga 'guinea fowl'	-xaŋga	-kaŋga (xaŋga)[33]

*3.1.4.3. Split of *d into /l/ and /r/*

All the Zone F languages have *d/*l > /l/ of some form or another, without exception. Again this shows how the lateral sound is important in any sound inventory. For instance, out of a sample of 317 languages in the UPSID[34], almost all had at least one liquid: 95.9% had at least one, while 72.6% had more than one liquid (Maddieson 1984:73). If all the languages descended from Proto Bantu have at least a liquid, mainly /l/, the likelihood is that Proto Bantu had at least one liquid. It is highly doubtful that this sound was not in Proto Bantu. To

---

[32] Only GiAhi has this word with /x/ in this context, (although that does not mean that it is not used in other contexts).

[33] The two varieties of the three show /k/.

[34] UPSID is an abbreviation for the UCLA Phonological Segment Inventory Database.

have a liquid (/l/ or /r/) as a reflex of PB *d is the majority situation in most Bantu languages. In Zone F, the two liquids, /l/ and /r/, occurring in one language is limited to the eastern parts only, in KɪRɪmi, KiiRaŋgi and KeemBuwe.

In these three l/r varieties, the distribution of /l/ and /r/ is sometimes environmentally conditioned, and at other times, dialectal. For instance, ɣɪnyaMunyiŋanyi tends to have more r's than l's, while in KiiRaŋgi and KeemBuwe, the distribution is consistently conditioned by environment.

(22) *-d > l, r, Ø

Variety ☞ Proto Bantu ⇓	KɪRɪmi	KiiRaŋgi	KeemBuwe.
*-gʊdʊ 'ant-hill'	gɪ-ɣʊʊ, gɪ-gʊʊ+	ky-ʊʊlʊ	c-oolo
*-bɪdɪ	m-wɪɪɾ, m-wɪɪlɪ++	mo-vɪɾ	mo-vere
*-dʊm- 'bite'	ʊ-ruma	kʊ-luma	o-loma
*deet- 'bring'	-eRa, -leeta+	-reta	-reeta
*-ded- 'bring up'	ʊ-rea, ʊ-ɾa+++	kur-era	o-rera
*-digo 'burden, load'	m-wiiɣo+, m-wɪɪɣo++, mʊ-lɪɣo+++	mu-ruwa?	mo-rigo
*-dedu 'chin'	gɪ-deu	ki-dedu	kɪ-dedu
*-dɪd- 'cry, wail'	-wɪɪra+, ʊ-lɪa++, kʊ-ra+++	kʊ-ɾɪra	o-rera
*-daŋgo 'door'	gɪnyam-waaŋgo	mu-lyaaŋgo	mo-reeŋgo
*-doot- 'dream (vt)'	g-ootea+, ʊ-oR-ea++, -goRea+++	kʊ-loot-era	o-lot-era

Key:
+ in ɣɪnyaMunyiŋanyi only
++ in GiAhi only
+++ in GɪRwana only

Olson (1967:23) points out that in KIRImi, the voiced alveolar flap /R/ (from PB *t), is articulated by one quick flap, and occurs with all the seven vowels. In KiiRaŋgi and KeeMbuwe this flap from PB *d occurs in complementary distribution with /l/ as explained below. Two processes can be observed in these alternations:

Firstly, KIRImi differs from KiiRaŋgi and KeeMbuwe in its tendency to lose /l/ when another alveolar sound is in any of the following four environments of consecutive adjacency. The picture is also muddled by apparent inter-dialectal borrowing: (a) adjacent to another lateral syllable, as in *-ded- > -rera > -rea 'rear a child'; (b) adjacent to a homorganic consonant like /t/ as in *-doot- > -otea or -oRea 'dream'; (c) adjacent /d/ as in *-dedu >-deu 'chin'; or (d) when intervocalically where both vowels in the root have the same quality, as in *-gʊdʊ > *-gʊʊ/ɣʊʊ 'ant-hill'

Secondly, the rule of l/r alternation in KeeMbuwe and KiiRaŋgi can be stated in two environments: /l/ became /r/ (a) when adjacent to front vowels /e/, /i/, (and /ɪ/ for KiiRaŋgi), or (b) intervocalically, if and only if one of the vowels flanking /l/ is /e/, /i/ or /ɪ/[35]. The rule can be represented as in (23). This rule-sharing places KeeMbuwe and KiiRaŋgi in one

[35] This environment has also been called 'before tense vowels' by Nurse (1999:25), although 'tense vowels' are difficult to define or isolate clearly (Katamba 1988:48), since the feature [+tense] is only relevant if the language has vocalic oppositions like [i-ɪ], [y-ʏ], [u-ʊ], and it is commonly used in Germanic languages, which have contrasts like English [su:t] 'suit' - [sʊt] 'soot' and German [m':tə] 'rental fee'- [mɪtə] 'middle' (Gussenhoven and Jacobs 1998:76-7). KeeMbuwe at least has no such opposition.

historical route of development at some point in the past.

(23) l → r/(V[-low, -back]) __V [-low, -back]

However, to see whether features in KeeMbuwe and KiiRaŋgi, and indeed, in Zone F are unique, it is important to compare the three major phonological processes with other languages from other Bantu languages. These processes are BS, DL and 7 > 5.

3.1.5. Similarities and differences with other zones

Because of common ancestry, Zone F is expected to be similar to other zones in many respects. Guthrie (1948) notes this with regard to the difficulty of isolating unique differentia for each zone.

According to Nurse (1999:20-25), the occurrence of processes like Dahl's Law, Bantu Spirantization and 7 > 5 strongly suggests a shared historical development from a common, earlier ancestor. *Table 3.9* illustrates how the three processes are distributed across some sample Bantu languages. In order for a zone to be separate from other zones linguistically, it must have features unique to it. If there are no unique features to identify the zones beyond any reasonable doubt, then little is achieved in classifying them into zones in the first place.

Table 3.9 BS, 7 > 5 and DL in Zone F and other zones

Feature ☞ Language or Zone ⇓	BS	7 > 5	Dahl's Law	Neither BS, 7 > 5 nor Dahl's Law
Zone F	SiSuumbwa, KiBende, ICɪWʊʊŋgʊ?	SiSuumbwa, KiBende, KeeMbuwe	KɪSukuma, (Part of KɪNyamweezi)	KɪnɪLaamba, KɪRɪmi, KɪKɪɪmbʊ, KiiRaŋgi
Other Zones	ŋgumba (A), Yaka (B), Tetela (C), LuGanda (EJ), KiSwahili[36] (G), KiMbundu (H) Lwena (K) CiLuba (L) KiPimbwe (M) CiTumbuka (N) KiMatumbi (P) Kwanyama (R) Xhosa (S)	ŋgumba (A), Yaka (B), KinyaRwanda (D) Baŋgubaŋgu (DJ) LuGanda (EJ) KiSwahili (G), KiMbundu (H) Lwena (K) Luba (L) CiTumbuka (N) Kwanyama (R) Xhosa (S)	KinyaRwanda (DJ) Gɪkʊyʊ (E) KiKurya (EJ) KiKiŋga (G)	Yambasa (A) Teke (B) Bobaŋgi (C) Mbole (D)

Compared with other zones, the Zone F members are not unique, since the three features are not confined to them alone. Dahl's Law, for example, is found across eastern Bantu in other zones like DJ, EJ, E and G. The crucial point may be in the small details of those processes. What the processes say is that some eastern Bantu languages might have evolved from a common ancestor which had Dahl's Law. *Table 3.9* also suggests that many other languages evolved from other ancestors which did not have DL. In other words, eastern Bantu is not a linguistic label, but rather a geographical one, containing several languages from different parents. Other zones therefore help only to highlight much earlier linguistic affiliation, but not

[36] The information with regard to Bantu Spirantization and 7 > 5 in other zones is from Schadeberg (1995), while that for Dahl's Law is from Nurse (1979b, 1993, 1999), Davy and Nurse (1982), Bennett (1986).

the uniqueness of F. That individuality can therefore be examined within Zone F itself for the details of the three processes' role in uniting or subdividing the zone.

3.1.6 BS, 7 > 5, DL in Zone F: Uniting or dividing criteria?

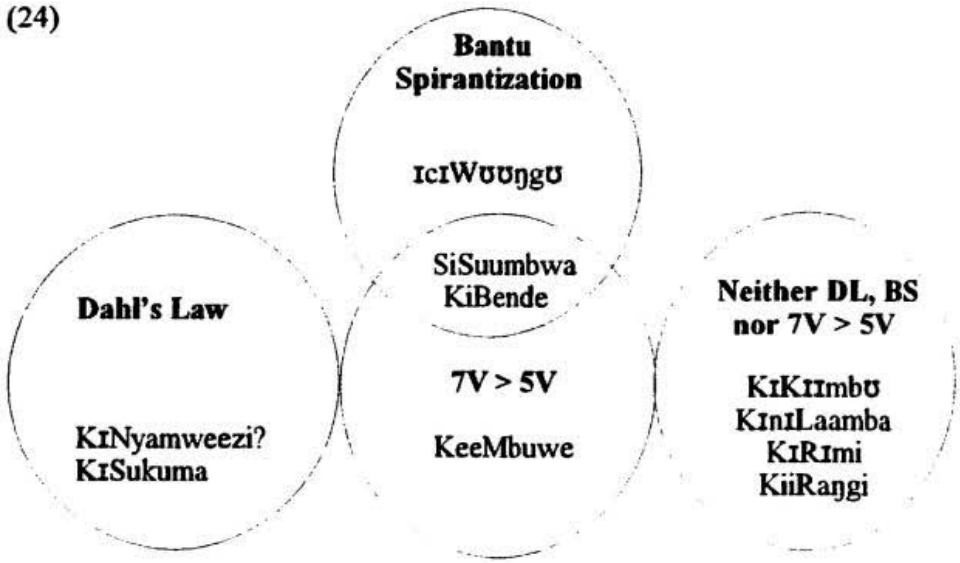
From *Table 3.9*, some groups based on individual languages in Zone F can be identified. These groups are significant linguistically in that they either unite the zone if they are internally unified themselves, or they divide it if their similarities are not immediately genetic. These groups can be represented in *Table 3.10*, 3.11, and graphically in (24).

Table 3.10 BS, 7 > 5 and DL in Zone F: Summary of significant classificatory criteria

Feature ☞ Language ⇓	*Bantu Spirantization*	*7 > 5*	*Dahl's Law*
SiSuumbwa	+	+	-
KɪSukuma	-	-	+
KɪDakama	-	-	+
KɪNyamweezi[37]	-	-	+?
KiBende	+	+	-
KɪnɪLaamba	-	-	-
KɪRɪmi	-	-	-
KɪKɪɪmbʊ	-	-	-
IcɪWʊʊŋgʊ	+	-/+?	-
KiiRaŋgi	-	-	-
KeeMbuwe	-	+	-

[37] Although KɪDakama (F22b) is traditionally part of KɪNyamweezi, the evidence so far suggests that core KɪNyamweezi is composed of F22a, F22d and F22e

(24)



Combined with the individual scenarios observed across the varieties surveyed so far, Bantu Spirantization, 7 > 5 and Dahl's Law converge to have a greater impact of linguistically segmenting Zone F into some five groups. In *Table 3.10*, similar groups are similarly shaded based on broad similarities. The members in these small groups, however, may not belong together if analyzed further, since, for example, the unity of KIKIImbU, KInILaamba, KIRImi and KiiRaŋgi is based on negative evidence, the absence of BS, 7 > 5 and DL. In other words, the number of groups is not fixed since it depends on the details observed. Without the details, the resulting five general groups are shown in (24).

The languages enclosed within one circle share one or more of the three named linguistically diagnostic features. The languages which are not in one circle and do not overlap anywhere

suggest mainly geographically, rather than genetically, derived similarity. For instance, 7 > 5 in isolation, without Bantu Spirantization, loses its diagnostic meaning. Vowel reduction alone as in KeeMbuwe suggests a different process, since the two, BS and 7 > 5 tend to be strongly interrelated causally. Because of that, KeeMbuwe sharing the 5V feature with SiSuumbwa and KiBende is not significant linguistically, since 5V is not the result of BS. Other features, as noted above, remove ɪCɪWʊʊŋgʊ from the SiSuumbwa and KiBende group, since, though ɪCɪWʊʊŋgʊ is reported to have 5V for some speakers, it is mainly a 7V language (Labroussi 1999:375). The groups therefore need some tighter criteria for sub-grouping so as to base the classification on genetically relevant features only. This fine tuning results in eight groups as shown in *Table 3.11*. Where there is more than one member, the closely related ones and isolates in each sub-group are put in brackets.

Table 3.11 BS, 7 > 5, DL: Phonologically-based linguistic groups of Zone F?

(SiSiloombo, SiYoombe), (KiLooŋgo)	(KɪmunaSukuma, GɪnaNtuzu, JinaKɪɪya), (KɪDakama)	(KiiRaŋgi, KeeMbuwe)
(KɪKonooŋgo) (KɪNyanyeembe, SiGalagaanza)	(KɪKɪɪmbʊ, North and south), (KɪnɪLaamba, Kɪnaʊshoola, KɪnɪHaanzu)	(GɪRwana, GiAhi) (ɣɪnyaMunyiŋanyi)
KiBende		ɪCɪWʊʊŋgʊ

With so many sub-groups, the representation in *Table 3.11* questions Zone F as a genetically valid group. Guthrie (1967:5, 6) himself does not claim that zones are based on linguistic

criteria or cohesion. He makes it clear that the differentia he identified and which are summarized in Chapter 2, are not unique for each zone but overlap and are shared by other zones as well. His classification of the Bantu languages into zones is mainly referential. The only major problem with Guthrie's zones is his definition and treatment of units he calls zones and groups. He says that while the zones are mainly geographical, based on proximity, the groups are linguistic (Guthrie 1948). The problem lies in the fact that Guthrie first sought geographical unity and then looked for common linguistic features.

3.1.7 Unity of Zone F: Synthesis

The linguistic evidence for Zone F cohesion is not robust, since, for instance, Dahl's Law in SiSuumbwa or some traces of Bantu Spirantization in KiSukuma/KiNyamweezi are a result of loans. This appearance of possessing traces of a feature like Dahl's Law in a language brings in the significant role of non-linguistic factors in borrowing and language change, which are of a sociolinguistic nature.

Sociolinguistic explanations are unavoidable facts since they forcefully impinge on and determine the route of the linguistic processes. Linguistic change due to contact is not brought about by purely linguistic factors, but by (mainly) social conditions as well, (Thomason and Kaufman 1988). For instance, it is rare for two linguistic communities to be symmetrical in terms of the control of equal power centres like social prestige or economic advantage. This common asymmetry in prestige due to economic, cultural, technological,

military, demographic or political advantage encourages bilingualism among the less prestigious group members, and pronounced borrowing ensues in such situations. This non-linguistic aspect of borrowing is explored more in **3.2** and in Chapter 5, where historical interpretations are also given.

3.2. SISUUMBWA-KISUKUMA-KINYAMWEEZI PHONOLOGICAL DEVELOPMENT

The main diagnostic changes in SiSuumbwa, KISukuma and KINyamwezi are three: the shift of 7 > 5 because vowels feature prominently in BS; Bantu Spirantization; and Dahl's Law, as discussed in this section. BS and 7 > 5 are discussed together because they are related. SiSuumbwa, having undergone 7 > 5, is 5V, while KISukuma and KINyamwezi are 7V, the original Proto Bantu vocalism. Although there are cases where members of the same group display different phonological inventories, some disparities in vowel quality are a pointer to some fundamental difference, either because of different paces and sources of innovation, isolation, or because of contact with different groups at different times and places.

On the other hand, BS offers another support for the hypothesis of fundamental difference between SiSuumbwa, KISukuma and KINyamwezi. Briefly, it is mainly SiSuumbwa which behaves differently from the two, showing BS, while KISukuma and KINyamwezi do not have the process, except in loanwords. BS is therefore explored in some detail below, followed by DL.

3.2.1. BS and 7 > 5 in SiSuumbwa, KɪSukuma and KɪNyamwezi

In this section, example words in two target environments are presented, *C/_i and *C/_u, where *C is any of the eight Proto Bantu consonant phonemes examined in the study. The *C/_a environment as the unmarked form has been shown in the general section on Zone F. The tables in each phonetic environment are also supplied with this unmarked form as an indicator of whether the BS forms from *C/_i and *C/_u are consistently different from the products of *C_a. Phonological mutation due to BS is best observed if the *C/_a environment is also presented because it is most unmarked in Bantu. PB *C/_a shows the regular reflex of a sound more clearly without the effect of conditioned assimilation.

3.2.1.1 Analysis of Bantu Spirantization in SiSuumbwa, KɪSukuma and KɪNyamwezi

The following examples illustrate the various sounds from Proto Bantu in the context of both internal innovation and external contact, as summarized after each data set.

*3.2.1.1.1 PB *pi*

(25) PB *-pik- 'arrive'

/-hika/ SiSiloombo, SiYoombe, KiLooŋgo
/-ʃika/ KɪmunaSukuma, KɪDakama
/-sika/ GɪnaNtuzu, KɪKonooŋgo
/-ʃiga/ JinaKɪɪya
/-fika/ KɪNyanyeembe, SiGalagaanza

(26) PB *-koopi 'flat of hand'

/-koofi/ SiSiloombo, SiYoombe, KiLooŋgo, KɪNyanyeembe, KɪKonooŋgo
- KɪmunaSukuma, GɪnaNtuzu, JinaKɪɪya, KɪDakama, SiGalagaanza

(27) PB *-piga 'hearthstone'

/ɪ-higa/ SiSuumbwa, KɪmunaSukuma
/ɪ-siga/ GɪnaNtuzu
/ɪ-ʃiga/ JinaKɪɪya
/i-figa/ KɪNyamweezi

(28) PB *-pic- 'hide'

/-bisa/ SiSiloombo
/-βisa/ SiYoombe, KɪSukuma, KɪNyamweezi
- KiLooŋgo

(29) *-piʊ 'knife'

/mu-syo/ KiLooŋgo
/lʊ-ʃʊ/ KɪSukuma, KɪDakama
/ki-syʊ/ KɪNyanyeembe
/lʊ-syʊ/ KɪKonooŋgo
- SiSiloombo, SiYoombe, SiGalagaanza

(30) PB *-pin- 'pinch, scratch'

/-ʂina/ SiSiloombo, SiYoombe, GɪnaNtuzu, KɪNyanyeembe, KɪKonooŋgo, SiGalagaanza
/-ʂuna/ KiLooŋgo
/-ʃina/ KɪmunaSukuma, JinaKɪɪya, KɪDakama

*Table 3.12 Reflexes, innovations, extraneous sounds and their possible sources, PB *p/_i*

Variety and unmarked form	*Sound/Innovation (6)*[38]		*Possible source/comment*
	Regular	Irregular	
SiSiloombo /h/	h(2)[39]	f(1), s(1), b(1)	KɪNyamweezi?, KiSwahili
SiYoombe /h/	h(2)	f(1), s(1),β(1)	DL, KɪNyamweezi?, KiSwahili
KiLooŋgo /h/	h(2)	f(1), s(2)	F21b, F22d?
KɪmunaSukuma/p/	ʃ(3)	h(1), β(1)	DL, minor innovation
GɪnaNtuzu /p/	s(3)	ʃ(1), β(1)	DL, minor innovation, F21a/c?
JinaKɪɪya /p/	ʃ(4)	β(1)	Dahl's Law
KɪDakama /p/	ʃ(3)	f(1), β(1)	Dahl's Law, KiSwahili?
KɪNyanyeembe /p/	s(2)	f(3), β(1)	DL, KiSwahili?
KɪKonooŋgo /p/	s(3)	f(2), β(1)	DL, KiSwahili?
SiGalagaanza /p/	s(1)	f(1), ʃ(1), β(1)	DL, SiSuumbwa?, KiSwahili?

Two regular reflexes are evident in this set of languages, summarized in two phonological processes in *Table 3.12* as glottalization in SiSuumbwa: *-pi > /h/, and palatalization in KɪSukuma: *-pi > /ʃ/ and KɪNyamweezi: *-p > /s/ (See also *Table 3.36*). The original reflex of *-pi in KɪSukuma and KɪNyamweezi points to /s/, which was retained by GɪnaNtuzu and the rest of KɪNyamweezi, except KɪDakama. With the *-pi reflexes, KɪDakama joins the two dialects of KɪSukuma as one unit characterized by the further palatalization of /s/ to /ʃ/.

[38] The total number of words for each environment, e.g PB *-p_i, is put in brackets in each table.

[39] The numbers in brackets after a reflex are total frequencies of a reflex in each dialect out of the total in the list used.

Glottalization in SiSuumbwa sheds some important light on the chronology of BS, 7 > 5 and Dahl's Law in the area. One would have expected the reflexes of PB *pi in SiSuumbwa to be homorganic spirants to the stops they replace rather than to the glottal fricative /h/. This suggests that glottalization preceded BS, thus blocking any chance of its occurrence. One interpretation is that BS was acquired later by SiSuumbwa.

On the other hand, each dialect is characterized by irregular reflexes which are extraneous, suggesting borrowing or an operation of other phonological rules. For instance the reflex /b/ in SiSuumbwa, like /β/ in the other dialects, is a result of Dahl's Law, which, once it operates initially in a sequence, blocks BS. In SiSuumbwa, Dahl's Law is absent except in a few words as shown in 3.2.2. For instance, in the word for 'oil', PB *makuta, is /mafuta/ rather than /mavuta/ if SiSuumbwa had Dahl's Law. The status of /β/ in SiSuumbwa is also not clear, since it seems to be in free variation with /b/, a situation which does not obtain in KISukuma and KINyamweezi

Another extraneous sound in the PB *pi context is /f/. KINyamweezi, including KIDakama has a shared innovation of /f/, possibly from borrowing. This is not found in KISukuma generally. The presence of /f/ in /-koofi/ 'flat of hand' in SiSuumbwa, KINyanyeembe and SiGalagaanza is a good illustration of possible borrowing, possibly from KiSwahili. For SiSuumbwa, it is the only /f/ out of the six words with *-pi in the examples given above. The expected reflex in SiSuumbwa would have been /ikoohi/ and in KINyamweezi /-koosi/ into

which the majority of the reflexes mutate. Since historically some βaSuumbwa, together with the βaNyamweezi, were renowned traders and adventurers plying the hinterland as far as Katanga in the DRC and later the East African coast in the late nineteenth century[40], the source of this word might be along the coast, probably from KiSwahili, /kofi/. The other members of Zone F which have such a reflex are KeeMbuwe and KiiRaŋgi, which, like KINyanyeembe and SiGalagaanza are located along the once busy trade routes in ivory and slaves, within their neighbourhoods and into the DRC and Zambia, and back to the East African coast (Roberts 1968, Shorter 1968b Kimambo 1993). KIKonooŋgo in the south and KISukuma and KIDakama in the north were outside the immediate trade route, and the word is not found, highlighting the importance of contact and some type of dominance in the transfer of words. This also suggests that the word is quite recent, since the coastal-hinterland trade was prevalent mainly from the 18th century (Kimambo 1993). On the other hand, one anomalous word in a language cannot rule out other possibilities on the source of the /f/ in this environment, as in *pik- in KINyanyeembe and SiGalagaanza. Three possibilities can be suggested for the source of /f/:

(a) since the speakers of SiGalagaanza and KINyanyeembe have been living along a main trade route, they were also active participants in the long distance trade in their own right during the same period, and they independently acquired the sound from the coast;
(b) it is the influence of some BS language like SiSuumbwa whose speakers popularized the

[40] Kahigi (1988:5)

word through trade;

(c) it is an internal innovation in KINyanyeembe, SiGalagaanza

The last explanation is not strong enough since some plosives apart from /p/ do not change to spirants in the same environment, as shown below, suggesting an external source.

Another case of borrowing is KImunaSukuma /h/ as a reflex of *pi as in ihiga < PB *-piga 'hearthstone', which is likely to have been acquired from SiSuumbwa. In the PB *pi context, /h/ is not found in the other dialects of both KISukuma and KINyamweezi.

The appearance of /ʃ/ in GInaNtuzu and SiGalagaanza may be a case of inter-dialectal borrowing, possibly from JinaKIIya or KImunaSukuma. In the PB *pi context, the regular reflex is /s/ for both, since /f/ or /ʃ/ are questionable in both.

In the KISukuma/KINyamweezi expected reflex, only GInaNtuzu and JinaKIIya behave as expected, with /s/ and /ʃ/ respectively.

From the above, two things can be said. First, glottalization in SiSuumbwa started before BS. This is indicated by the reflex of PB *pi being /h/ rather than /f/ or any other fricative. Secondly, speakers of languages are not static in space and time, but they interact with different speech environments and speakers of other languages. This has the impact of

introducing new sounds in their languages. This is revealed by both the regular and irregular reflexes of Proto Bantu sounds even within related dialects.

*3.2.1.1.2 PB *pu*

(31) PB *-pud- 'blow on, blow up'

/-fuula/ SiSiloombo, KɪSukuma, KɪDakama
/-puula/ KɪNyanyeembe
/-fulɪɪzya/ KɪKonooŋgo
- SiYoombe, KiLooŋgo, SiGalagaanza

(32) PB *-pukʊd- 'dig up, dig out'

/-fukʊʊla/ SiSiloombo, KɪNyamweezi
/-sukʊʊla/ GɪnaNtuzu
/-fugʊʊla/ JinaKɪɪya
- SiYoombe, KiLooŋgo, KɪmunaSukuma

(33) PB *-pudo 'foam'

/-fulo/ SiSuumbwa, KɪSukuma, KɪNyamweezi

(34) PB *-deepu 'long'

/n-dɪɪhu/ KɪmunaSukuma
/n-dɪpu, nɪpu/ GɪnaNtuzu
/ -lɪhu/ JinaKɪɪya
/ -liihu/ KɪDakama, KɪKonooŋgo
/n-diihu/ KɪNyanyeembe
- SiGalagaanza, SiSuumbwa

(35) PB *-pum- 'go out'

/-fuma/ SiYoombe, JinaKɪɪya, KɪNyanyeembe, KɪKonooŋgo, SiGalagaanza
- SiSiloombo, KiLooŋgo, KɪmunaSukuma, GɪnaNtuzu, KɪDakama

(36) PB *-pum- 'produce, put forth, display'

/-fumya/ SiYoombe, KɪNyamweezi
/-funya/ KɪmunaSukuma, JinaKɪɪya
/-sunya/ GɪnaNtuzu
- SiSiloombo, KiLooŋgo

*Table 3.13 Reflexes, innovations, extraneous sounds and their possible sources, PB *pu*

Variety and unmarked form	*Sound/Innovation* (6)		*Possible source/comment*
	Regular	Irregular	
SiSiloombo /h/	f(3)	-	-
SiYoombe /h/	f(3)	-	-
KiLooŋgo /h/	f(1)	-	Insufficient data?[41]
KɪmunaSukuma /p/	f(3)	h(1)	SiSuumbwa?
GɪnaNtuzu /p/	s(2)	p(1)?[42], f(1)	KɪSukuma dialects, internal
JinaKɪɪya /p/	f(5)	h(1)	KɪmunaSukuma < SiSuumbwa?
KɪDakama /p/	f(4)	h(1)	SiSuumbwa?
KɪNyanyeembe /p/	f(4)	p(1)?, h(1)	SiSuumbwa?
KɪKonooŋgo /p/	f(5)	h(1)	SiSuumbwa?
SiGalagaanza /p/	f(4)	-	-

[41] Only one word out of six was filled, so the adequacy of the reflex as representative can be questioned.

[42] /p/ as a retention from Proto Bantu suggests a regular feature, while the BS forms suggest markedness although they are the majority and seem more regular.

In the majority of languages, PB *pu yields /f/ as a regular change (see Nurse 1979). Most languages surrounding KINyamweezi and KISukuma have /f/. For example, within Zone F, KInILaamba and KIKIImbU retain /p/, unless they have borrowed heavily like KIKIImbU North. KIRImi, KeeMbuwe and KiiRaŋgi have /f/ as a regular reflex of PB *p regardless of phonetic context. SiSuumbwa displays /f/ without exception. For the rest of the SSN dialects, each indicates more than one reflex.

An interesting feature of double reflexes is displayed in the KINyamweezi and KISukuma dialects. All except SiGalagaanza have double reflexes, mainly regular /f/ and /h/. Within the SSN group, only SiSuumbwa has consistent glottalization, that is, with /h/, especially in the [-superclose] position. Languages outside Zone F with /h/ in the [-superclose] environment include E60, some E50, EJ10/20 and G30. In the PB *pu context, only G60 has /h/ (Nurse 1979:458). If KISukuma and KINyamweezi did not glottalize, then the source of /h/ in the PB *pu context can be G60 which has /h/. Otherwise, the source may be EJ10/20 and SiSuumbwa (F23), as nearest neighbours (assuming that such neighbourliness is ancient). This may explain the presence of irregular reflexes like /h/ and /f/ as a result of mixing vocabulary stock from different languages (Labroussi 1999, Batibo 2000). For instance, the following JinaKIIya words (which were not included in the list used in the thesis), indicate that there are cases which do not become spirants. These words may not be confined to JinaKIIya alone, although this was not checked. The majority are not in Proto Bantu either.

(37)
gw-ɪpuuna 'rise very early in the morning'
βʊ-puuna 'type of wild, creeping, seasonal plant, its leaves resembling those of sweet potatoes, with brightly coloured flowers'
gʊ-pula 'to elope (for a man, as a verb (*vt*))' < PB *-pud- 'blow (with mouth)'
gʊ-puuga 'to chase away troublesome beings like insects, chickens, or children'
gʊ-puluguna 'to try to wriggle free from a very confining place, usually by small animals and insects, like a tick in the inner ear'
ɪ-pu/ma-pu 'stomach of ruminous animals like cows, resembling a towel' < PB *-pu 'stomach'

All these words have superclose vowels in them, but they do not undergo spirantization. This existence of BS and non-BS forms in the same environment in JinaKIIya or in KISukuma and KINyamweezi in general suggests two things. It may either mean minor local innovation or borrowing. Local innovation implies that the /f/ from PB *pu is a result of a process which is not BS, but rather it is due to another assimilatory process like palatalization, which results in /s/ in GInaNtuzu and /f/ in the other dialects.

On the other hand, borrowing cannot be discounted either, since the spirants may be a result of loan words which had spirants, and were added to the non-spirantizing stock found in the language. Because of borrowing without adapting the system of the source language, the native forms continue to be used with the loans, resulting in inconsistent reflexes. The loan hypothesis is more consistent, since internal innovation implies regular change across the board in a phonetic context. In this interpretation, any form with a spirant in KISukuma and KINyamweezi can be viewed as a loan which might have triggered palatalization in some words, appearing like BS, while retaining the old non-BS forms in other words.

Another sub-type of borrowing is the case where all forms with /pu/ are borrowed. This depends on the following scenario: there is regular change in KISukuma or KINyamweezi of the form PB *pu → /fu/, and then when later words were borrowed with /pu/, they were not affected by the weakening process to /fu/.

If the loan hypothesis is correct, then both borrowing and minor innovation explain the occurrence of the double or ternary reflexes in KISukuma and KINyamweezi. For instance the presence of /h/ and BS in SiSuumbwa makes it a good source of influence over KISukuma and KINyamweezi. Another way of looking at it is that some SiSuumbwa speakers were absorbed into the KISukuma/KINyamweezi speech communities in the past and brought their words with them. Some also remained independent, though lived adjacently, and interacted with KISukuma/KINyamweezi speakers, while maintaining their linguistic and cultural identity generally. In turn, this shows that SiSuumbwa culture might have been very influential in the area for a considerable period of time for such widespread loans to occur so pervasively. However, the powerful and higher status of SiSuumbwa of the past has not been documented.

Another interesting point to note for the PB *pu reflexes is the length of the vowels in the roots of PB and some daughter languages. For instance, Proto Bantu has a short /u/, in *pud- 'blow up' while the majority of the reflexes have the long /uu/, except KIKonnoŋgo which has /-fulIIsya/ 'blow up'. Two hypotheses can be advanced to explain this

phenomenon of vowel lengthening. Firstly, it might be a rule in SSN which states that penultimate syllables tend to lengthen their vowels in some verbs. This can be illustrated by JinaKIIya whose data is readily available:

(38)

-fùùlà	< PB *-pud-	'blow'
-fùùlɪ̀ɪ̀là		'blow, especially by mouth, in order to soothe'
-fùlà		'drink water and be satisfied'
-fùlă		'wash clothes'
-pùlà		'snatch, as the wind would do'
-pùlɪ̀là		'snatch for (someone)'

(39)

-fùgʊ̀ʊ̀là	< PB *-pukʊd-	'dig up'
-fùgʊ̀là		'snatch from the grip of someone, by force'
-bùkʊ́ʊ́là		'harvest maize'
cf -ifùgʊ́là		'refuse because of anger, disgust'

From (38) and (39), it seems true that in JinaKIIya, vowel length is first and foremost phonological. secondly, it is used to differentiate between shades of meaning between related concepts. In (38) for example, the reflex of *p is both /f/ and /p/ as a semantic strategy. Thirdly, vowel length is also influenced lastly by phonetic context. Hence, penultimate position may be true in some dialects, although not only that in JinaKIIya, because -fùùlɪ̀ɪ̀là 'blow in order to soothe' and -pùlɪ̀là 'snatch for (someone)' violate that rule. In Table *3.12*, GINantuzu and KINyanyeembe have /p/ as reflexes of PB *p, indicating that the /p/ is a retention from PB. This would then suggest that all the other reflexes, /f/ and /h/, are actually loans, or innovations triggered by loans. This is especially true of /f/.

*3.2.1.1.3 PB *-bi*

(40) PB *-bin- 'dance'

/-βina/ KIDakama, KISukuma
- SiSuumbwa, KINyanyeembe, KIKonooŋgo, SiGalagaanza

(41) PB *-bi 'excrement, dung'

/maamvi/ SiSiloombo , SiYoombe
/mazi/ KiLooŋgo
/maaʃi/ KISukuma
/maafi/ KIDakama
/maavi/ KINyanyeembe, KIKonooŋgo, SiGalagaanza

(42) PB *-bido 'spread, smear'

/-βila/ KISukuma, KIDakama, KINyanyeembe, KIKonooŋgo,
- SiSuumbwa, SiGalagaanza

(43) PB *-bimb- 'swell'

/-viimba/ SiSiloombo, SiYoombe
/-ziimba/ KiLooŋgo
/-βiimba/ KISukuma, KINyamweezi

(44) PB *-yibi 'thief'

/mwiivi/ SiSiloombo, SiYoombe
/mwiiβi/ KiLooŋgo, KIKonooŋgo
/ŋwiiβi/ KImunaSukuma, KIDakama
/ŋuβi/ GInaNtuzu
/ŋwIβi/ JinaKIIya
/mwiβi/ KINyanyeembe
/mwiizi/ SiGalagaanza

(45) PB *-bita 'war'

/βita/ SiSiloombo
/vita/ SiGalagaanza
- SiYoombe, KiLooŋgo, KɪSukuma, KɪDakama, KɪNyanyeembe, KɪKonooŋgo

The reflexes for each of these languages are KɪSukuma /β/, KɪNyamweezi /β/ and SiSuumbwa /v/. In SiSuumbwa, the data suggest removing KiLooŋgo (F23c), leaving only SiSiloombo (F23a) and SiYoombe (F23b). KiLooŋgo has consistent /z/ as a reflex of PB *bi.

*Table 3.14 Reflexes, innovations, extraneous sounds and their possible sources, PB *b/_i*

Variety and unmarked form	*Sound/Innovation (6)*		*Possible source/ comment*
	Regular	Irregular	
SiSiloombo /β/	v(3)	β(1)	F21, F22
SiYoombe /β/	v(3)	-	-
KiLooŋgo /β/	z(2)	β(1)	F21, F22
KɪmunaSukuma /β/	β(4)	ʃ(1)	?
GɪnaNtuzu /β/	β(4)	ʃ(1)	?
JinaKɪɪya /β/	β(4)	ʃ(1)	?
KɪDakama /β/	β(4)	f(1)	F23 and devoice?
KɪNyanyeembe /β/	β(3)	v(1)	F23
KɪKonooŋgo /β/	β(3)	v(1)	F23
SiGalagaanza /β/	β(1)	z(1), v(1)	F23

The possible influence of SiSuumbwa is revealed in the irregular innovation to /vi/ as a reflex of *bi in KɪNyanyeembe, KɪKonooŋgo and SiGalagaanza. KɪDakama has /fi/, devoicing /vi/. KɪSukuma also has an irregular /ʃ/, suggesting a second innovation, in addition to the regular /β/ reflex. This supports the hypothesis of loanwords from a BS language suggested above

which triggered palatalization before superclose vowels[43].

KiLooŋgo is consistent in being different from SiSiloombo and SiYoombe, although both have an irregular /β/ reflex, suggesting the same source, possibly F21 and F22. In addition, /mwiizi/ in SiGalaaganza seems a borrowed word, probably from KiSwahili. This borrowing is also manifested in example (46) in SiSiloombo and SiGalagaanza. The word for 'war' in the area is not PB *-bita. The extraneous sound /β/ in SiSiloombo in this slot suggests borrowing too, since the expected form would be /vita/ rather than /βita/. SiGalagaanza's reflex /vita/, although identical to the KiSwahili form, might have been acquired through SiSuumbwa and regularized to fit the SiSuumbwa forms.

*3.2.1.1.4 PB *-bu*

(46) PB *-bu 'ashes'

/mavu/ SiSiloombo, SiYoombe, SiGalagaanza
/mazu/ KiLooŋgo
/maβu/ KISukuma, KIDakama
/mawu/ KIKonooŋgo
- KINyanyeembe

(47) PB *-bunj- 'break, snap'

/-vuna/ SiSiloombo, SiYoombe, SiGalagaanza
- KiLooŋgo, KISukuma, KIDakama, KINyanyeembe, KIKonooŋgo

[43] KiBende, which has a devoicing rule, has /f/ without exception from /v/ in this PB *bi context (See Nurse 1988:58, also noted above)

(48) PB *-buda 'rain'

/ mvula/ SiSiloombo, SiYoombe, KɪNyanyeembe, SíGalagaanza
/eenzula/ KiLooŋgo
/mbula/ KɪSukuma, KɪDakama, KɪKonooŋgo

*Table 3.15 Reflexes, innovations, extraneous sounds and their possible sources, PB *bu*

Variety and unmarked form	*Sound/Innovation (3)*		*Possible source/ comment*
	Regular	Irregular	
SiSiloombo /β/	v(3)	-	-
SiYoombe /β/	v(3)	-	-
KiLooŋgo /β/	z(2)	-	-
KɪmunaSukuma /β/	β(2)[44]	-	-
GɪnaNtuzu /β/	β(2)	-	-
JinaKɪɪya /β/	β(2)	-	-
KɪDakama /β/	β(2)	-	-
KɪNyanyeembe /β/	-	v(1)	F23
KɪKonooŋgo /β/	β(1)	w(1)[45]	Phonetic strategy
SiGalagaanza /β/	-	v(3)[46]	F23

Although only three words were found in the PB *bu context, their value is priceless in showing consistent regularity. SiSuumbwa (F23a, b) have /v/, KiLooŋgo /z/, and KɪSukuma

[44] When PB *b is intervocalic, it regularly changes to /β/, a process which might have helped later to have /β/ and /b/ as separate phonemes. When *b is prenasalized or is underlyingly /b/ as opposed to phonemic /β/, then it remains /b/, as in JinaKɪɪya /màbŭ/ /mosquitoes' in contrast to /màβŭ/ ashes', /màβū/ 'grey (colour)' or /mààβŭ/ 'forests'

[45] The change may be a phonetic strategy for /Ø/.

[46] Although no /b/ or /β/ is shown in the three words used, /v/ is still irregular.

and KINyamweezi /β/.

The disadvantage of having only a few words is also revealed in the data by SiGalagaanza. Although its regular reflex in that context is /β/, the influence of a BS language is telling. All the examples show /v/ consistently. KIKonoonjgo shows less influence from a BS language, and the reflex of pre-nasalized PB *bu is /b/. By inference, a bilabial fricative regular reflex is implied in all the KINyamweezi dialects by this KIKonoonjgo example.

Another important aspect in the data is the role of pre-nasalized forms. The form for 'rain' PB *mbuda or *mbula, belongs to *b/N _, which is not a purely *bu context. However, it is revealing in the way the /b/ is consistent even in this pre-nasal context. SiSuumbwa (F23a, b) shows a consistent /v/ reflex, while KiLoonjgo is also consistent in displaying /z/. KINyanyeembe and SiGalagaanza also show a consistent /v/, suggesting the likely former influence of SiSuumbwa in linguistic terms. The only drawback in KINyanyeembe is that only one word was filled, whereas all three are present in SiGalagaanza.

*3.2.1.1.5 PB *-ti*

(49) PB *-kIti 'darkness'

/giiti/ SiYoombe, KISukuma, KIDakama, KINyanyeembe, KIKonoonjgo
- SiSiloombo, KiLoonjgo, SiGalagaanza

(50) PB *-tiŋgiɪd- 'be sleepy, doze'

/-tiindila/ SiYoombe, KiLooŋgo
/-tiindɪla/ KɪSukuma, KɪDakama
/-tiindɪɪla/ KɪNyanyeembe, KɪKonooŋgo
/-tiindiila/ SiGalagaanza
- SiSiloombo

(51) PB *-tina 'base of tree trunk'

/i-tina/ KɪmunaSukuma, GɪnaNtuzu, KɪNyamweezi
/ɪ-tina/ JinaKɪɪya
- SiSuumbwa

(52) PB *-tiŋga 'long hair, of animals'

/βʊ-tiiŋga/ GɪnaNtuzu
/wɪ-tiiŋga/ JinaKɪɪya
KɪDakama -
/ʊ-siiŋga/ KɪNyanyeembe
/u-siiŋga/ KɪKonooŋgo
/lʊ-siiŋga/ SiGalagaanza
- SiSuumbwa, KɪmunaSukuma

(53) PB *-piti 'hyena'

/m-fisi/ SiSiloombo, SiYoombe, SiGalagaanza
/em-pisi/ KiLooŋgo
/m-biti/ KɪSukuma, KɪDakama, KɪNyanyeembe, KɪKonooŋgo

(54) PB *-koti 'nape'

/βu-kosi/ SiSiloombo
/βʊ-kosi/ KɪmunaSukuma, SiGalagaanza
/βʊ-gosi/ GɪnaNtuzu
/u-kosi/ KɪKonooŋgo
- SiYoombe, KiLooŋgo, JinaKɪɪya, KɪDakama, KɪNyanyeembe

(55) PB *-tikʊ 'night'

/βʊ-jikʊ/ KɪmunaSukuma, JinaKIIya
/βʊ-zikʊ/ GɪnaNtuzu, KɪDakama, KɪKonooŋgo
/u-zikʊ/ KɪNyanyeembe
/βʊ-fuku/ SiGalagaanza
- SiSuumbwa

(56) PB *-tindɪk- 'push'

/-siindika/ SiYoombe, KiLooŋgo
/-ʃiindɪka/ KɪmunaSukuma, JinaKIIya, KɪDakama
/-siindɪka/ GɪnaNtuzu,
/-siindɪka/ KɪNyanyeembe, SiGalagaanza
- KɪKonooŋgo, SiSiloombo

(57) PB *-tikʊ 'rainy season'

/ki-dikʊ/ KɪmunaSukuma, KɪDakama, KɪNyanyeembe, KɪKonooŋgo
/gi-dikʊ/ GɪnaNtuzu
/ji-dikʊ/ JinaKIIya
/si-dikʊ/ SiGalagaanza
- SiSuumbwa

(58) PB *-timʊ 'spear'

/i-sumu/ SiSiloombo, SiYoombe, SiGalagaanza
/i-cumu/ KiLooŋgo
/i-cimu/ KɪSukuma, KɪDakama
/i-kimu/ KɪNyanyeembe
/i-timu/ KɪKonooŋgo

(59) PB *-tim- 'strike with a spear'

/-cima/ KɪSukuma, KɪDakama
/-kima/ KɪKonooŋgo
- SiSuumbwa, KɪNyanyeembe, SiGalagaanza

In F23, the PB *ti reflex is /si/ while in F21 and F22, it is /ti/. All three (SiSuumbwa, KɪSukuma and KɪNyamweezi) have irregular reflexes, reflecting external sources which also suggest some externally driven innovation. Words with spirants for PB *ti, are not as frequent as those from PB *pi or *pu.

*Table 3.16 Reflexes, innovations, extraneous sounds and their possible sources, PB *ti*

Variety and unmarked form	*Sound/Innovation*(11)		*Possible source/comment*
	Regular	Irregular	
SiSiloombo /t/	s(3)	-	-
SiYoombe /t/	s(3)	t(2)	F21, F22
KiLooŋgo /t/	s(2)	t(1), c(1)	F21
KɪmunaSukuma /t/	t(3)[47]	d(1), j(1),ʃ(1), s(2), c(2)	F23
GɪnaNtuzu /t/	t(5)	z(1), s(2), c(2)	F23
JinaKɪɪya /t/	t(5)	d(1), j(1), ʃ(1), c(2)	F23
KɪDakama /t/	t(4)	d(1), z(1), ʃ(1), c(2)	F23
KɪNyanyeembe /t/	t(4)	d(1), z(1), s(1), k(1)	F23, internal
KɪKonooŋgo /t/	t(5)	z(1), s(1), k(1)	F23, internal
SiGalagaanza /t/	t(2)	d(1), f(1), s(5)	F23

As to the sources of the irregular sound changes, the major one is through borrowing. These are revealed by the regular patterns which are displayed against violations of those expectations. For instance, /giiti/ 'darkness' in SiYoombe suggests borrowing, since the

[47] The presence of the reflex /d/ for PB *t in KɪSukuma, and to some extent KɪNyamweezi emphasises the original underlying sound /t/ which is voiced by Dahl's Law, as in *-tikʊ > /-dikʊ/ 'rainy season'. This can be compared to second syllable position /t/ in *-kiti > /-giiti/ 'darkness', *-piti > /-biti/ 'hyena'.

regular reflex observed is /s/, while /t/ is regular in KISukuma and KINyamweezi. Another observation in the same word is the operation of Dahl's Law in SiYoombe. SiSuumbwa's Dahl's Law status is synchronically minimal generally, as indicated in **3.1** above, suggesting that the word is a loan. Such external influence or later entry into the language can also be observed with regard to KINyamweezi and GInaNtuzu's cases of /s/ and KImunaSukuma and JinaKIIya's /ʃ/. They are cases of palatalization which are only few, occurring in some words like *-tindIk- 'push'. KiLooŋgo's continued dissimilarity with SiSuumbwa in general with the /z/ reflex emphasizes a probable different historical origin.

Borrowing from KiSwahili is also suggested in PB *-koti 'nape' in the reflexes in F21 and F22 other than /t/. The word refers to collars of shirts rather than 'nape'. The expected form in KISukuma would be [βʊgoti], without any weakening of *t. It is quite unlikely to be [βʊkodi] or [βʊgosi], since, by Dahl's Law, it is only the first voiceless segment of the stem which is normally dissimilated in order to simplify the pronunciation when two voiceless plosive consonant sounds are adjacent. All words borrowed into KISukuma are normally subject to Dahl's Law, modified depending on the operation of the law in each dialect[48]. The transition from [βʊkoti] to [βʊkodi] or [βʊkosi] does not simplify pronunciation since voice is followed by two voiceless segments as in the original with /t/, a situation which is normally

[48] Borrowed words from KiSwahili illustrating DL in JinaKIIya: tatizo → datiizo 'problem'; kupe → gupe 'tick'; kutu → gutu 'rust'; katibu → gatiβʊ < Arabic [ka:tib] 'writer, secretary, clerk'; katani → gatani < Arabic [katta:n] 'sisal, flax'; mapato → mabato 'income, receipts'

avoided. In addition GɪnaNtuzu does not voice a stop when the following segment is /s/.

For JinaKɪɪya, for instance 'nape' is ŋhʊʊni [ŋʊ̀ʊ́ni] < -kʊ̀ʊ́ni. But one might also argue that this word comes from PB *-koti by a route so complicated, it may be unlikely to be the source[49].

Another suspicious case is from PB *tikʊ 'night' in both KɪSukuma and KɪNyamweezi. SiGalagaanza has /βʊfuku/, like KiBende's /bufuku/. In KIsukuma and KɪNyamwezi, the form seems suspect because it violates the expected rules for *t in that environment. The expected form would be /βʊdikʊ/ by Dahl's Law, unless that was disfavoured by the presence of /-dikʊ/ 'rainy season' and it had to be spirantized to /z/ and /j/ like a reflex of /d/. But that semantic explanation is not adequate since 'rainy season' *bʊ-tikʊ (Class 14 -bʊ) and 'night' *kɪ-tikʊ (Class 7 kɪ/kj/) do not belong in the same noun class in all varieties. A noun class as a category is a sufficient distinguisher. Otherwise there is no motivation for /z/ and /j/ as reflexes of *t. Another explanation for this may be that, the proper word deriving those forms is actually not PB *-tikʊ, but rather PB *-cikʊ 'day of 24 hours'. This is also not accurate because, in JinaKɪɪya the expected form would then be /-ʃigʊ/ rather than /-jikʊ/.

---

[49] *ŋkoti Proto Bantu 'nape'

ŋkodi	By Dahl's Law
ŋkoni	Prefix nasality spread
ŋhoni	Loss of /k/ occlusion
ŋhooni	vowel lengthening before nasal
ŋhʊʊni	Vowel raising (height anticipatory assimilation)

There are also some likely idiosyncratic innovations, or cases when the origin of words is not known. For instance, the word /isumu/ is suspect in SiSuumbwa, just as it is in SiGalagaanza, unless the final /u/ just spreads to the /i/ by deleting the feature [+front] in /i/ in anticipatory assimilation. But this is not a productive process. The word might also come from PB *-tumʊ 'spear'or PB *-tumo 'spear' instead of PB *-timʊ 'spear'. Even in KISukuma and KINyamweezi, the word is suspect because the reflex of *t as /c/ is not regular, although it is in KiiRaŋgi. The expected reflex is /t/ as it occurs in KIKonooŋgo.

Apart from these few exception PB *ti offers quite regular reflexes, despite the small sample in some languages. For example, the words in Sisuumbwa are limited to only a few out of the eleven in the sample. Only three words are recorded for SiSiloombo, four for SiYoombe and five for KiLooŋgo, compared to a minimum of nine and a maximum of all eleven in the KISukuma and KINyamweezi group. This is a general difficulty in the data where not all words appear in all languages.

*3.2.1.1.6 PB *-tu*

(60) PB *-tuŋg- 'pack (luggage)'

/-tuuŋgIla/ KImunaSukuma
/-tuuŋga/ GInaNtuzu, KIDakama, KINyanyeembe, SiGalagaanza
/-tuuŋganya/ JinaKIIya
/-tuuŋgaania/ KIKonooŋgo
- SiSuumbwa

(61) PB *-tumbɪ 'stool'

/i-suumbɪ/ KɪmunaSukuma, GɪnaNtuzu, KɪDakama, KɪNyanyeembe, KɪKonooŋgo
/ɪ-suumbɪ/ JinaKɪɪya
/i-fuumbɪ/ SiGalagaanza
- SiSuumbwa

(62) PB *-tum- 'sew'

/-suma/ SiYoombe, KiLooŋgo, KɪmunaSukuma, JinaKɪɪya, KɪNyanyeembe
- SiSiloombo, GɪnaNtuzu, KɪDakama, KɪKonooŋgo, SiGalagaanza

Although the data in this set were severely limited, the pattern is similar to the situation where there are ample data, as in *3.2.1.1.5* with PB *ti. The reflexes for PB *tu are /s/ for both SiSuumbwa and KiLooŋgo on the one hand, and /t/ for KɪSukuma and KɪNyamweezi. The extraneous sound /s/ in KɪSukuma and KɪNyamweezi can be presumed to be from SiSuumbwa, although other sources cannot be ruled out.

For instance, the reflex of PB *tu in *-tumbɪ 'stool' (62), is /s/ in all dialects represented, except SiGalagaanza, which has /f/. In Zone F, it is ɣɪnyaMunyiŋanyi and Keembuwe only which have a reflex of /t/, while GɪAhi and GɪRwana have /R/. The rest have a different lexeme altogether, except North KɪKɪɪmbʊ, which has unexpected /kɪsuumbɪ/ for a non-spirantizing language, while KiiRaŋgi has /icuumbɪ/. This hints at an external source since a stable language like KɪKɪɪmbʊ is not expected to have such a form, unless it has borrowed it from other languages quite recently.

*Table 3.17 Reflexes, innovations, extraneous sounds and their possible sources, PB *tu*

Variety and unmarked form	*Sound/Innovation (3)*		*Possible source/comment*
	Regular	Irregular	
SiSiloombo /t/	-[50]	-	-
SiYoombe /t/	s(1)	-	-
KiLooŋgo /t/	s(1)	-	-
KɪmunaSukuma /t/	t(1)	s(1)	F23?
GɪnaNtuzu /t/	t(1)	s(1)	F23?
JinaKɪɪya /t/	t(1)	s(2)	F23?
KɪDakama /t/	t(1)	s(1)	F23?
KɪNyanyeembe /t/	t(1)	s(2)	F23?
KɪKonooŋgo /t/	t(1)	s(1)	F23?
SiGalagaanza /t/	t(1)	f(1)	F23?

For KɪSukuma and KɪNyamweezi, a reflex with /s/ instead of /t/ seems extraneous, since the reflex should be /t/ according to the majority of the reflexes, which have been taken as more regular. A similar word is that for 'flour', PB *-tu. The word also suggests an external source not far in the past, since it is βʊsu or βʊfu in KɪSukuma. The history of the word implies that cultivating cereals like millet and maize and extracting flour from them might have come somewhat later, perhaps brought into the area by migrants whose languages were already spirantizing. The histories of both KɪSukuma and SiSuumbwa speakers have legendary exploits of hunting, indicating that even SiSuumbwa might have got the word from another farming community speaking a different Bantu language relatively recently. It is

[50] Data were limited in this word: only three words were relevant for the PB *-tu environment, and out of these, all were absent in SiSiloombo. Only SiGalagaanza had /f/.

especially important to note here that, when dealing with *t > /s/ in the word for 'sew', PB *-tum-, Kahigi (1988:250) suggests that the word might have entered SiSuumbwa from KISukuma, because he found it extraneous, just as it is in KISukuma. However, he does not question BS. On the other hand, Kahigi (ibid:228) says unreservedly that KISukuma does not generally spirantize, as exemplified in *3.2.1.2*.

Since -suma 'sew' is assumed to be a recent borrowing into both languages, then this can also point to other source languages outside Zone F, and indeed, outside Tanzania, in the DRC or Zambia and beyond. For instance, KIHoloholo (D28) of the DRC has some features which are quite similar to many KISukuma ones[51]. This weakens the assumption that any BS-like change in KISukuma or KINyamweezi is necessarily a result of borrowing from a nearby language or dialect. The nearest choice is only a synchronic convenience. For the past, any source is possible, given the mobility of people and the potential for language contact and borrowing/lending[52] words.

The irregularity of /s/ in KISukuma can be illustrated from the following JinaKIIya words in (63), since /t/ exists widely before [u]. Some of these words are in Guthrie's Proto Bantu list,

---

[51] The KIHoloholo features were pointed out to me by Nurse when he said some of the tense/aspects looked quite similar to those of KISukuma from Coupez (1955)

[52] The terms 'borrowing' or 'loan', though established, are not precise. Borrowing implies lending, and both words suggest a loan which is normally refunded or returned. Such a situation does not apply in language, just as 'transfer' is not as precise because it implies a one-way conduit. Words like 'adoption' (imperfect assimilation) and 'adaption' (total assimilation) are preferable.

while the majority are not, suggesting that they were omitted, or they are KISukuma innovations, which can be inventions or borrowing:

(63)

-tulumeenha 'slide, normally away from the (bed) headrest during sleep'	ɪ-tuundulu 'evergreen tropical shrub of the *mimosoideae* subfamily'
-tuundaga 'urinate'(PB *-tʊnd- 'urinate')	-tuja 'kneel' (cf tʊja 'pass and feed domestic animals in a farm, accidentally or deliberately')
ɪ-tuunji 'urinary bladder' (-tʊnd- 'urinate')	-tuuβa 'get hungry'
-tuga 'catch in the act'	-tuuŋgo < nhuuŋgo 'civet cat' PB
ŋwiituuŋga 'zombie'	mitugo[53] 'cattle, domestic animals'
-tuuma 'extend something, usually buttocks in order to block somebody'	-tula 'drive cows from one place to another'
ntuumba/mituumba '(round) container, usually of calabash, especially for storing medicine'	lʊ-dutu/n-dutu 'erect breasts of adolescents and young, unmarried women'
-tuna 'kneel, or bend the knees to senior people, not necessarily old, usually as a sign of deference, by women'	-dutuma 'grow and become luxuriously greener than previously'
-tunʊla 'lean forward and raise the buttocks while exposing them'	-tuumʊla puncture (PB *-tuub- 'pierce'?)
ɪtuumbagɪja 'muscle tightener for taming an unruly cow or ox'	ɪ-dutuβɪja 'light darkness due to heavy clouds'
lʊ-tuumbɪ/n̩uumbi 'division of maize, millet, sugar cane, etc stalks'	ji-tuundulu 'abdomen of grasshoppers'

An interesting word is 'become blunt', PB *-tuup-, which in JinaKIIya is -duuha, although

[53] Although this word is widespread in east African Bantu languages, it is not found in Guthrie's nor Meeussen's reconstructions of Proto Bantu.

because of the limited amount and type of words in our data, it was not included. The path of change of this word might have been the following:

(64)

PB *-tuup- > -duupa > -duuha or -duuh-ɪla 'become blunt'

➜ DL ➜ Glott

This word is significant in telling us that Dahl's Law[54] in KISukuma occurred first, and then glottalization followed later. Contact with a source for glottalization like SiSuumbwa is later since an earlier contact would result in *p becoming /h/, thus blocking most of Dahl's Law in those words inherited from Proto Bantu.

From the above discussion, the regular reflexes suggested in Table 3.15 have validity, namely, SiSuumbwa /s/, KISukuma and KINyamweezi /t/.

*3.2.1.1.7 PB *-ɗi*

(65) PB *-gadi 'blood'

/ma-gazi/ SiSiloombo, SiYoombe
/mu-gazi/ KINyamweezi
- KiLoongo, KISukuma

[54] The chronology of four phonological processes in SSN is put together in the conclusion to this chapter (section **3.3**). These processes are glottalization (Glott), Bantu Spirantization (BS), 7 > 5 and Dahl's Law (DL).

(66) PB *-cʊdi 'broth'

/n-sʊji/ KɪmunaSukuma, JinaKɪɪya
/n-sʊzi/ GɪnaNtuzu
/mu-sʊzi/ KɪDakama, KɪNyanyeembe, KɪKonooŋgo
- SiGalagaanza, SiSuumbwa

(67) PB *-jʊʊdi 'day after tomorrow'

/ma-zʊʊli/ SiSiloombo, SiYoombe, KɪSukuma, KɪNyamweezi
/i-zweeli/? KiLooŋgo

(68) PB *-bʊdi 'goat'

/m-buzi/ SiSiloombo, SiYoombe
/em-buzi/ KiLooŋgo
/m-bʊli/ KɪSukuma, KɪDakama, KɪKonooŋgo
/m-bʊzi/ KɪNyanyeembe, SiGalagaanza

(69) PB *-di 'string'

/bu-zi/ SiSiloombo
/βu-zi/ SiYoombe, KiLooŋgo
/βʊ-ji/ KɪmunaSukuma, GɪnaNtuzu
/u-zi/ KɪDakama, KɪNyanyeembe, SiGalagaanza
/βʊ-zi/ KɪKonooŋgo
- JinaKɪɪya

(70) PB *-yedi 'moon'

/kw-eezi/ SiSuumbwa
/ŋw-eeji/ KɪmunaSukuma, JinaKɪɪya
/ŋw-eezi/ GɪnaNtuzu, KɪDakama
/mw-eezi/ KɪNyanyeembe, KɪKonooŋgo, SiGalagaanza

(71) PB *-codi 'tears'

/mii-sozi/ SiSiloombo, GɪnaNtuzu, KɪDakama, KɪKonooŋgo
/miin-sozi/ SiYoombe, SiGalagaanza
/shii-soji/ KɪmunaSukuma
/ji-isoji/ JinaKɪɪya
- KiLooŋgo, KɪNyanyeembe

(72) PB *-dito 'weight'

/-dito/ KɪSukuma
- SiSuumbwa, KɪNyamweezi

(73) PB *-dʊdi 'whistling'

KɪmunaSukuma/shi-lʊji, nʊji/
/nʊli/ GɪnaNtuzu, JinaKɪɪya
/mu-lʊli/ KɪDakama
/mu-lʊʊnzi/ KɪNyanyeembe
/mu-lʊzi/ KɪKonooŋgo, SiGalagaanza
- SiSuumbwa

(74) PB *-kadi 'wife'

/mu-kazi/ SiYoombe, KiLooŋgo
- SiSiloombo, KɪSukuma, KɪNyamweezi

Three patterns of regular reflexes are revealed in this PB *di environment, making three groups out of the three language groups. The decision to classify them as regular or irregular is based first and foremost on frequency of phoneme occurrence. These regular reflexes are: SiSuumbwa /z/; KɪNyamweezi /z, l/; and KɪSukuma /l, z(j)/ (or (GɪnaNtuzu /z/ on the one hand, and KɪmunaSukuma and JinaKɪɪya /j/, on the other).

*Table 3.18 Reflexes, innovations, extraneous sounds and their possible sources, PB *di*

Variety and unmarked form	*Sound/Innovation* (10)		*Possible source/comment*
	Regular	Irregular	
SiSiloombo /l/	z (5)[55]	l (1)	KISukuma/KINyamweezi?
SiYoombe /l/	z (6)	l (1)	KISukuma/KINyamweezi?
KiLoonjgo /l/	z (4)	l (1)	KISukuma/KINyamweezi?
KImunaSukuma /l/	j (5)?, l (2)	d (1)?	internal innovation?
GInaNtuzu /l/	z (3)?, l (3)	d (1)?	internal innovation?
JinaKIIya /l/	j(3)?, l (3)	d (l)?	internal innovation?
KIDakama /l/	z (5)?, l (3)	-	SiSuumbwa?
KINyanyeembe /l/	z (6)?, l (1)	-	SiSuumbwa?
KIKonoonjgo /l/	z (6)?, l (2)	-	SiSuumbwa?
SiGalagaanza /l/	z (6)?, l (1)	-	SiSuumbwa?

KINyamweezi and KISukuma have similar regular reflexes, except for the irregular forms which separate them. The irregular reflexes are SiSuumbwa /l/ and KISukuma /d/. KINyamweezi, including KIDakama, does not show any irregular forms.

Within the regular reflex list, there is one problem. The regular reflexes for both KISukuma and KINyamweezi are two, /z/ and /l/. Their derivation is based on the frequency principle, that the more frequently a sound occurs, the more likely it belonged to the proto language. In this case, both /z/ and /l/ have an almost equal frequency of occurrence, indicating that they have equal chances of being the regular proto sounds of the proto languages in question.

[55] Total number of cases out of 10 words used, out of which some have no responses for reasons such as the presence of a different lexeme.

However, it is unlikely that the proto sound had two phones in the proto language, each with a status of an independent phoneme. And that is the problem which has been pointed out in **3.0** above.

The presence of /j/ or /z/ as a reflex of /d/ then becomes a process of palatalization rather than Bantu Spirantization, as observed above. Hence, these reflexes are based on a mixture of two sounds, /d/ and /l/, as illustrated below.

Although only one word was available where the reflex for PB *d was also /d/, as in /-dito/ 'heavy' in KISukuma, an important insight can be gained. The example seems to illustrate the fact that, without external influence, KISukuma and KINyamweezi's reflexes for /d/ may remain /d/ or change to /l/ regularly in certain contexts, if a Proto Bantu *l and *d are posited as separate phonemes. There are many cases in synchronic JinaKIIya with /di/ suggesting the scenario suggested above: they may be examples of the inherited forms from Proto Bantu or innovation by invention or borrowing. However a more plausible explanation is that the words are from some intermediate ancestors, reflecting the reflexes of the protoforms of the immediate ancestor language, Proto KISukuma. Such synchronic lexemes with /d/ indicate a diachronic path, even if /d/ has been lost by many languages. Borrowing is an unlikely explanation, since /-dito/ for example, is not attested in the immediate vicinity languages[56].

[56] Lack of attested examples is not necessarily a sufficient argument, although as a provisional hypothesis, it is useful.

Some of the words with /di/ and /li/ respectively in JinaKIIya include the following:

(75)
-diiŋho [diiŋ̊o] 'sheep's accumulated dung, especially in sheep house'
-diiŋ̊imɪla 'rumble deeply, creating a low deafening din, mainly of big drums'
-diima 'hold, catch'
-diindiβʊka 'become shallow'
-βʊdidiga, -diidi 'person who is arrogant in a foolish way'
-didoha 'become heavy' < PB *-dito 'heavy'
-diimu 'hard, of physical objects'
-gulumaadi 'tortoise'
-Saaŋʊʊdi 'male, proper name'
-diba 'accidentally poke into somebody's eye' (cf PB *-dib- shut (eyes))'

(76)

-βaliga 'throw a long stick, aiming to hit something'
-βiliiŋga 'collect into a heap, heap'
-lilimʊka '(of many birds) take off at once, noisily, flying in all directions'
-dugali 'tarantula'
-liinda 'guard'
-liinha [liiŋ̊a] 'climb'
-liga 'leave one's straight path during a walk, journey, travel; duck'
-liimbe 'cucumbers'
-jiliili 'wild animals which eat and destroy crops'
-jilimɪla 'internally feel vibrations because of tremors caused by extreme cold'

From the above contrast between /d/ and /l/ in JinaKIIya, and by extension, in KISukuma, it is plausible to posit that /-dito/ is an inherited form from Proto Bantu. It is not from DL, since there is no attested form to suggest that it is from PB *-tito, just as /-dakama/ 'south' is well formed as an inherited form without DL in a dialect like KIDakama 'southern speech'. It is not from *takama. The lexeme {takama} seems to occur only because of likely back-formation. From the list of PB *di words above, the irregular forms based on the *d, *l

assumption display the following patterns in each language, suggesting their lack of native phonotactics.

The case for innovation by inventions or borrowing is supported by a few words like gulumaadi 'tortoise' < Barbaig gumald 'tortoise'. Since such loans from Nilotic members are not widespread except in restricted areas like animal husbandry, it is unlikely that Barbaig is the source of /di/.

The word for 'day after tomorrow', PB *-jʊʊdi, reveals some discrepancies in SiSuumbwa. With /l/ as a reflex, it is a regular, inherited form in KISukuma and KINyamweezi. In SiSuumbwa, the expected reflex is /ma-zuuzi/, instead of /ma-zʊʊli/. This form with /l/ shows two problems. First, the phonetic /ʊʊ/ is marked in SiSuumbwa, indicating a possible loan, probably from KISukuma or KINyamweezi. Secondly, in SiSuumbwa, it is the only /l/ out of the total 10 in the sample, as shown in *Table 3.18*, and it is not well-formed within the SiSuumbwa phonological system, especially vocalic, which is presumably 5V. The /ʊ/ suggests a 7V language like KISukuma. The phonetic realization of the word violates two important SiSuumbwa rules, 5V-violation, which shows up here as 7V; and *d > l/__i, instead of *d > z/_ i.

Another word is PB *-di 'string'. The word might have entered SSN probably by way of trade to and from the coast, since it resembles the KiSwahili form /uzi/. The reflex is also

suspect in both KISukuma and KINyamweezi, since one would expect /βʊli/ or /βʊdi/ rather than /βʊzi/ or /uzi/.

With PB *yedi 'moon', SiSuumbwa suggests a different historical path indicated by the different prefix, a non-nasal kw-[57] instead of the mu- in KISukuma and KINyamweezi. The word can be explained as a dissimilation strategy. KISukuma and KINyamweezi used the choice of z/j as a strategy to avoid the homophone /ŋweeli/ (KISukuma) and /mweeli/ (KINyamweezi) 'west'. There are several cases where this strategy is used, exemplified by JinaKIIya. This strategy involves either borrowing, palatalization, syllable reduplication, vowel lengthening, tonal change, or other process that is employed to avoid homophony and polysemy as PB *-dim- and PB *-tʊtʊm-, shown in (77) and (78):

(77)

PB 617 *-dim- 'become extinguished'
PB 618 *-dim(ìd)- 'get lost'

-jimă 'become extinguished, faint' (of fire or life of animate entity)
-jimììlâ 'get lost (become extinguished physically or metaphorically, in the mind)'
-lilímà 'close one's eyes'
-limàlímà 'twinkle, as if in the process of disappearing or being extinguished; fade'

It is unlikely that /-jima/ < PB 617 *-dim- 'become extinguished' and /-jimIIla/ < PB 618 *-

[57] The prefix kw-eezi is used in Western Highlands (DJ60), parts of Rutara (EJ10/20) and Suguti (EJ25).

dim(ɪd)- 'get lost' are two independent lexemes, since *-dim(ɪd)- appears to be only an extension of or derivation from *-dim-, both having the reference of 'disappearing'. Although the original *d does not feature, the various strategies of derivation indicate that, the evolution of *d to /l/, /z/ or /j/ is an internal innovation unrelated to BS, although with external influence from BS languages, the process was accommodated in loan words, though not productively in other lexemes.

(78) PB 1854 *-tʊ̀tʊ̀m- 'boil up, boil over'

-dùdùmà 'boil over, bubble'
-dùtùmà 'become bigger, greener and more luxurious (of leaves)' (Dahl's Law)
-lùlùmà 'flow noisily (of rivers)'
-hùlùmà 'sprout luxuriously after being trimmed (of sweet potato leaves and similar creeping vegetation)'
-dùùlúmà 'accelerate even faster, as if to hit a target (of stones and other throwable material)'
-hùùlúmà 'move swiftly in a flowing motion like an eagle'

Most of the words in (78) seem to have been derived from one lexeme with a sense of accelerating from an initial point of slower motion to a faster rate. The original Proto Bantu form is *-tʊ̀tʊ̀m-, so the /-tutuma/ form in JinaKIIya is not inherited from PB, since [-dutuma] as a DL form may be a recent adoption from a BS language which has lost /u/ (superclose) and /ʊ/ (high) distinction. The word was then adapted in the language by following phonological adjustments, like DL, a dissimilation rule of consecutive voiceless syllables containing plosives.

The word for 'wife' PB *-kadi is found in SiSuumbwa , (74) above, but not in KISukuma

and KINyamweezi. However, the word for 'wife' or 'woman' found in KISukuma and KINyamweezi, /-kI(I)ma/, is also found in SiSiloombo, as /mukIIma/ with the same phonological shape, instead of being /mukiima/. Such a form makes it suspicious. Its value, however, lies in uniting SSN's lexemes until their linguistic memberships are mixed and confused. This mixture leads to the view that, KISukuma, KINyamweezi and SiSuumbwa share an immediate node in the hierarchy of genetic affiliation. This inter-mixing of each others' vocabulary may be one of the triggers of and reason for the entry of /z/ or /j/ as a reflex of *d and *l in KISukuma and KINyamweezi. This makes the distinction between *d and *l reflexes difficult to isolate in cases where such a distinction is absent[58]. Comparing the words with *d or *l in other languages makes things a bit clearer. For instance, while it is not clear whether Proto KISukuma had /d/ or /l/ in PB *yedi 'moon' because of inter-dialectal mixing, languages like KIKIImbʊ, a Zone F sister language which has changed little from Proto Bantu, has /mweeli/, while KiiRaŋgi and KeeMbuwe have /mweeri/.

A revised picture for regular sound change in PB *di, with the irregular reflexes in brackets can thus be: SiSuumbwa /z/ (/l/); KINyamweezi /l/ (/z/); KISukuma /l, d/ (j/z). Such a division between /d/ and /l/ words suggests one thing: /l/ and /d/ are both inherited phonemes. The reconstruction of Meinhof's PB *l and Guthrie's PB *d do not constitute an either/or situation. Rather, it is *l and *d, with some languages treating them as allophones in

[58] There are some minor problems with *l and *d in Indo-European too where a name like Odysseus is also Ulysseus (John Hewson, p.c.)

complementary distribution, while in others like KISukuma, they are separate phonemes, a situation analogous to that of voiceless nasals. In some languages/dialects like KISukuma and KIDakama, the voiceless nasals are both phonemic and allophonic, whether appearing as morphologized forms in some words, and hence phonemic, or in homorganic contexts as allophonic realizations of stops after nasal prefixes.

*3.2.1.1.8 PB *du*

(79) -dedu 'beard'

/n-dezu/ KISukuma, KIDakama, KINyanyeembe, KIKonooŋgo
/ka-levu/ SiGalagaanza
- SiSiloombo, SiYoombe, KiLooŋgo

(80) -dugʊt- 'blow bellows'

/-vuguta/ SiSiloombo, SiYoombe
/-zuguta/ KiLooŋgo
/-fukuta/ KINyanyeembe
/-tuguta/ KIKonooŋgo
/-vukuta/ SiGalagaanza
- KImunaSukuma, GInaNtuzu, JinaKIIya, KIDakama

(81) -dedu 'chin'

/ci-lezu/ KiLooŋgo
/ʃi-lezu/ KImunaSukuma
/gI-lezu/ GInaNtuzu
/ji-lezu/ JinaKIIya
/kI-lezu/ KIDakama
/ki-lezu/ KINyanyeembe, KIKonooŋgo
/ka-levu/ SiGalagaanza (cf kasaku in F23a,b, class marker 12 ka- instead of Class 7 kI-)
- SiSiloombo, SiYoombe

(82) -dug- 'cook'

/-zuga/ KɪSukuma, KɪDakama
- SiSiloombo, SiYoombe, KiLooŋgo, KɪNyanyeembe, KɪKonooŋgo, SiGalagaanza

(83) -dub- 'fish, vt'

/-zuβa/ KɪSukuma, KɪDakama, KɪNyanyeembe, KɪKonooŋgo
- SiSiloombo, SiYoombe, KiLooŋgo, SiGalagaanza

(84) -du/-dui/-duɪ 'knee'

/si-vi/ SiSiloombo
/si-vwi/ SiYoombe
/ci-zwi/ KiLooŋgo
/i-zwi/ KɪmunaSukuma, GɪnaNtuzu, KɪDakama
/ɪ-zwi/ JinaKɪɪya
- KɪNyanyeembe, KɪKonooŋgo, SiGalagaanza

(85) -dugʊd- 'open, vt'

/-lugʊla/ KɪSukuma, KɪDakama, KɪNyanyeembe , KɪKonooŋgo
- SiSiloombo, SiYoombe, KiLooŋgo, SiGalagaanza

(86) -gudube 'pig'

/ŋ-guluβe/ SiSiloombo, JinaKɪɪya, KɪNyamweezi, KɪmunaSukuma, GɪnaNtuzu
- SiYoombe, KiLooŋgo,

(87) -dut- 'pull'

/-duta/ KɪmunaSukuma, JinaKɪɪya
/-luta/ KɪDakama
- SiSiloombo, SiYoombe, KiLooŋgo, GɪnaNtuzu, KɪNyanyeembe, KɪKonooŋgo, SiGalagaanza

(88) -badu 'rib'

/lu-βavu/ SiSiloombo, SiYoombe, SiGalagaanza
/lu-βazu/ KiLooŋgo
/lʊ-βazu/ KISukuma, KIDakama, KINyanyeembe, KIKonooŋgo

(89) -gudu 'strength, power, effort'

/ŋ-guzu/ SiSiloombo, SiYoombe, KISukuma, KIDakama, KINyanyeembe, KIKonooŋgo
- KiLooŋgo, SiGalagaanza

From *Table 3.19*, the regular reflexes are the following: SiSuumbwa /v/; KISukuma /d, l/; and KINyamweezi /l/. The results for KISukuma and KINyamweezi however, seem contradictory, since in both cases, the majority are regularly /z/, except for SiGalagaanza, whose regular reflex is /v/, like SiSuumbwa (F23a,b).

*Table 3.19 Reflexes, innovations, extraneous sounds and their possible sources, PB *du*

Variety and unmarked form	*Sound/Innovation* (11)		*Possible source/comment*
	Regular	Irregular	
SiSiloombo /l/	v(3)	l(1), z(1)	Loan F21/F22, F42?
SiYoombe /l/	v(3)	z(1)	F21/F22
KiLooŋgo /l/	z(4)	-	-
KImunaSukuma /l/	l(1), d(1)	z(7)	recent internal innovation
GInaNtuzu /l/	l(1)	z(7)	recent internal innovation
JinaKIIya /l/	l(2), d(1)	z(7)	recent internal innovation
KIDakama /l/	l(3)	z(7)	recent internal innovation
KINyanyeembe /l/	l(2)	z(5), f(1)	recent internal innovation
KIKonooŋgo /l/	l(2)	z(5), t(1)	recent internal innovation
SiGalagaanza /l/	v(4)?	l(1)?	/l/ from G42, /v/ from F23?

The reasoning around this apparent contradiction is the same as for PB *-di above, especially with regard to -dito 'heavy' and -duta 'pull'. These words are both d-t or l-t, suggesting Dahl's Law. In fact, Dahl's Law did not apply to them to yield /-dito/ or /-duta/ because /-dito/ and /-duta/ were already well-formed. These words are also not attested in languages without DL. For instance, KiSwahili has /-zito/ by BS: PB *d →z / __*i. Since KiSwahili does not undergo DL, the original sound is *d rather than *t.

To begin with, irregular SiSuumbwa's /l/ occurs in ŋ-guluβe 'pig' < PB *-gudube 'pig', a likely loan from KiSwahili, just as it is in KISukuma and KINyamweezi. Another likely loan is ŋ-guzu 'strength' found in F21/F22. In F23a and F23b, it violates the regular change to /v/, showing that it is not native. Kahigi (1988:267-8) also lends support to this notion of regular /v/.

An argument for pervasive appearance of regular reflexes as /z/ in KISukuma and KINyamweezi is the strategy of homophony and polysemy avoidance mentioned above. This strategy seems to have been encouraged especially by borrowed BS features from loan words which proved useful in distinguishing meanings. Such a strategy is illustrated from the JinaKIIya example again where the presence of /d/ and /l/ is not in doubt. The phoneme /z/ appears mainly when it is necessary to disambiguate homophonous words, especially when those words are in the same lexical class. For instance, in (90), the two words/-dùmà/ as a verb to 'declare open enmity or opposition with someone' and as an adjective, 'big, huge,

large' are left alone without any modification because the chances of being ambiguous are reduced. They cannot co-occur in the same slot. When they are both verbs, as in /-dùùsà/ 'dig deeply' cf /lùùsà/ 'kick', the /d/ is dissimilated in the second word. There arefew exceptions like /-lùmà/ 'leave abruptly with a great noise, like birds and cattle', and /-lùmà/ 'roar like a bull or thunder' < PB *-dum- 'roar, rumble', which are identical in everything, except meaning. The strategy of using a fricative instead of a stop is demonstrated in /-dùùmà/ 'fail' and /-zùùmà/ 'give a low, pleasant din, like that of a KɪSukuma single-stringed guitar, *ndono* (KiSwahili *zeze*) used in βʊzoli (also known as βʊyʊʊlɪ) dance'

(90)

/-dùmà/ 'declare open enmity or opposition with someone'
/-dùmà/ 'big, huge, large'
/-dùùmà/ 'fail' cf /-zùùmà/ 'give a low, pleasant din, like that of a KɪSukuma single-stringed guitar, ndono'
/-dùbʊlà/ 'uproot' (See Batibo 1992b:65) cf -zuβʊlà 'fish out from water' < PB *- dub- 'fish'
/-dùdùmà/ 'swell' /-lùlùmà/ 'roar, like a waterfall, or a big, boiling pot full of food'
/-dùùsà/ 'dig deeply (a hole or metaphorically, pain)' cf /lùùsà/ 'kick',
/-dùùt(y)à/ 'make string, especially from cotton' cf /-lùùtà/ 'throw something, especially at someone or something',
/-dùtà/ 'pull' < PB *-dùt- 'pull' (no opposition, so word remains like PB)

(91)

/-lùmà/ 'leave abruptly with great a noise, like birds and cattle'
/-lùmà/ 'roar, rumble like thunder, or a bull'< PB *-dùm- 'roar, rumble'
/-lùmă/ 'bite' < PB *-dŭm- 'bite', cf /-zùmă/ 'curse' < PB *-dùm- 'curse'

The irregular /z/ in KɪSukuma and KɪNyamweezi therefore is encouraged by many factors, including the internal motivation of dissimilating sounds in order to differentiate meaning, and

also palatalization. Loan words with BS encourage these internal processes even further, by regularizing most phonemes in that environment by analogy, even when there is no semantic motivation. This can be illustrated by causatives in F21 and F22 (KISukuma and KINyamweezi) which use l → z or l →j /_ (i). Maybe, in F21/F22, PB *l → l. but then, words from F23 (SiSuumbwa) arrived with PB *l → z/j. The F21/F22 speakers recognized the connection between z/j and l as reflexes of PB *l, so they started to exploit it in pairs of words and in morphological derivations where it maybe joined with incipient palatalization. Only KiLooŋgo remains consistent with the /z/ reflexes, without borrowing /v/ from SiSuumbwa, as SiGalagaanza likely does. SiGalagaanza sometimes gives the impression that it belongs to SiSuumbwa with its /v/ reflexes of PB *-du, although the relatively consistent 7V system discounts that possibility.

*3.2.1.1.9 -*ci*

(92) PB *-cid- 'cease, be finished'

/-ʃila/ KImunaSukuma, JinaKIIya, KIDakama
/-sila/ GInaNtuzu
- SiSuumbwa, KINyanyeembe, KIKonooŋgo, SiGalagaanza

(93) PB *-cikʊ 'day'

/lʊ-siku/ SiSiloombo, SiYoombe
/lʊ-ʃikʊ/ KImunaSukuma, KIDakama
/lʊ-sikʊ/ GInaNtuzu, KINyanyeembe, KIKonooŋgo
/lʊ-ʃigʊ/ JinaKIIya
/n-sikʊ/ SiGalagaanza
- KiLooŋgo

(94) PB *-ciŋga 'long, straight hair, like those of animals or Europeans'

/ʊ-siiŋga/ KINyanyeembe
/u-siiŋga/ KIKonooŋgo
/lʊ-siiŋga/ SiGalagaanza
- SiSuumbwa, KISukuma, KIDakama

(95) PB *-koci 'husband'
-
/ŋ-gooshi / KImunaSukuma, JinaKIIya
/ŋ-goosi/ GInaNtuzu
/mu-goosha/ KIDakama
/mu-gooshi / KINyanyeembe
/mu-goosi / KIKonooŋgo
- SiSuumbwa, SiGalagaanza

(96) PB *-ciŋg- 'rub'

/-ʃiiŋg-/ JinaKIIya
- SiSuumbwa, KImunaSukuma, GInaNtuzu, KINyamweezi

The regular reflex of PB *ci in the majority of dialects is /si/, except for three dialects: KImunaSukuma, JinaKIIya and KIDakama which go one step further by palatalizing /s/ to /ʃi/. Among this group of three, two, KImunaSukuma and JinaKIIya are consistent in a similar way with regard to the most frequent reflex of PB *di which is /j/, instead of the majority, including GInaNtuzu, /z/, which is similar to the SiSuumbwa and KINyamweezi reflexes, as compared in *Table 3.21*.

*Table 3.20 Reflexes, innovations, extraneous sounds and their possible sources, PB *ci*

Variety and unmarked form	Sound/Innovation (5)		Possible source/comment
	Regular	Irregular	
SiSiloombo /s/	s (1)	-	-
SiYoombe /s/	s(1)	-	-
KiLooŋgo /s/	-	-	-
KɪmunaSukuma /s/	ʃ(3)	-	-
GɪnaNtuzu /s/	s(3)	-	-
JinaKɪɪya /s/	ʃ(4)	-	-
KɪDakama /s/	ʃ(3)	-	-
KɪNyanyeembe /s/	s(2)	ʃ(1)	F21
KɪKonooŋgo /s/	s(3)	-	-
SiGalagaanza /s/	s(2)	-	-

From *Table 3.21*, KɪmunaSukuma and JinaKɪɪya are palatal dialects, as is KɪDakama to some extent in this context: PB *ci →/si/ →/ʃi/.

*Table 3.21. Similarity of most frequent reflexes in SSN from PB *di and PB *ci*

Language/Dialect	Most frequent reflex of PB *di	Most frequent reflex of PB *ci
F21b, F22, F23	z	s
F21a, F21c, F22b[59]	j	ʃ

[59] KɪDakama (F22b) looks more like KɪmunaSukuma (F21a) and JinaKɪɪya (F21c) in the context of PB *ci only, indicating some pervasive influence, which can be areal or genetic. The picture in the reflexes of PB *di is like the rest F22 generally, being /z/, instead of /j/.

The irregular reflexes may have their origin from an outside dialect, as is the case of /ʃ/ in KɪNyanyeembe which is a likely inter-dialectal loan from F21a or F21c. The most difficult type of loan to detect is one which is well-formed, as if it is inherited directly from PB. For instance, /-siiŋga/ 'long hair', is confined to KɪNyamweezi only, excluding KɪDakama.

It is unlikely to be a native KɪNyamweezi word, especially when it is missing in KɪDakama, KɪSukuma and SiSuumbwa. In addition, its prefix /ʊ-/ or /u-/ is suspicious, since its class marker is supposed to be /lʊ-/ (singular) or /βʊ-/ (plural or mass), and the loss of [β] is marked in KɪNyamweezi. Its likely source may be KiSwahili /u-siŋga/ 'long hair'. On the other hand, the word suggests that KɪDakama is a possible member of KɪSukuma rather than KɪNyamweezi. This is true with regard to the division of socio-political entities during the colonial period in Tanzania[60].

[60] The 'tribal' boundaries which were also regarded as 'linguistic', often coincided with administrative borders like provinces, districts and wards, so that it was common to regard certain 'tribes' as occupying certain locations as if speech communities were as rigid and as relatively unchanging as physical features like mountains and valleys. For instance, many maps show that Tabora and Shinyanga Regions are occupied by the KɪNyamweezi and KɪSukuma speakers respectively, divided by the seasonal Manooŋga River. But Manooŋga River or any physical boundary anywhere in the world cannot be regarded strictly as a language boundary because of its porousness, as indicated by the common shared features between KɪSukuma and KɪDakama, the later being grouped as KɪNyamweezi. Because such labels carry immense socio-cultural and legal complications like ethnic identity and political territoriality, changing such perceptions is very difficult given the short period of 40 years since flag independence in 1961.

*3.2.1.1.10 PB *-cu*

(97) PB *-cuk 'pour'

/-fuka/ SiSiloombo
/-fuuka/ SiGalagaanza
- SiYoombe, KiLoongo, KISukuma, KIDakama, KINyanyeembe, KIKonoongo

(98) PB *-cub 'urinate'

/-suβaala/ SiSiloombo, SiYoombe, KImunaSukuma, JinaKIIya, KINyamweezi
- KiLoongo, GInaNtuzu

The limited data in this word only emphasizes the affinity between SiGalagaanza and SiSuumbwa, on the one hand, and the relatively regular reflex /s/ on the other. However, the lengthened form in SiGalagaanza may imply something important, that the source of the word, and hence the phoneme, is external. It may be the lengthening found in KISukuma, as a semantic strategy, indicating that the word itself is a loan from a BS language.

The almost uniform reflex of /-suβaala/ 'urinate' < PB *-cub- 'urinate' across the three languages is interesting in relation to SiSuumbwa. If that one word above is any indication, then, the expected morpheme would be -fubaala, rather than -suβaala, since /s/ is extraneous in SiSuumbwa in this context. Kahigi (1988:197) suggests that /f/ (and /v/) may be from Proto SiSuumbwa, because they cannot be traced back to any other segment since derived /f/ is from PB *pu, or some PB *tu and PB *ku. It can also be a loan from Cushitic -fug- 'to drain out' (Ehret, p.c.). What this means is that, /f/ may be a loan from other languages. All

in all, it would be unwise to draw conclusions based on two words. This also applies to PB *ju, with one word, and PB *ji with none.

*3.2.1.1.11 PB *ki*

(99) PB*ki- 'die'

/-ca/ KISukuma
- SiSuumbwa, KINyamweezi

(100) PB *-kind 'overcome'

/-kiinda/ SiSiloombo, SiYoombe, GInaNtuzu, JinaKIIya, KIDakama, KINyanyeembe, KIKonooŋgo
(/-tiinda/) KImunaSukuma
/-kiinda, -siinda/ SiGalagaanza
- KiLooŋgo

(101) PB *-yoki 'smoke'

/lyoonsi/ SiSiloombo, SiYoombe, SiGalagaanza
/lyoochi/ KISukuma, KIDakama
/lyoŋki/ KINyanyeembe
/lyoki/ KIKonooŋgo
- KiLooŋgo

(102) PB *-kidi 'soot'

/ma-kili/ JinaKIIya, KINyamweezi
- SiSuumbwa, KImunaSukuma, GInaNtuzu

The regular reflexes are SiSuumbwa /s/, KISukuma /k/, and KINyamweezi /k/. The irregular reflexes in SiSuumbwa suggest borrowing from neighbours, possibly from KISukuma or

KINyamweezi. On the other hand, KISukuma gets its irregular reflexes by regular palatalization as an assimilatory process from the superclose /i/ to a vowel (or semi-vowel), as with /a/ in PB *-kia →-cia →cã 'die'. This assimilatory behaviour in KISukuma suggests that, on its own, *i does not palatalize when it is followed by [-superclose] vowels, illustrated in (103).

*Table 3.22 Reflexes, innovations, extraneous sounds and their possible sources, PB *ki*

Variety and unmarked form	*Sound/Innovation* (4)		*Possible source/comment*
	Regular	Irregular	
SiSiloombo /k/	/s/(1)	/k/(1)	F21/F22?
SiYoombe /k/	/s/(1)	/k/(1)	F21/F22?
KiLoonɡo /k/	-	-	-
KImunaSukuma /k/	/k/(0)	/c/(2)	internal innovation?
GInaNtuzu /k/	/k/(1)	/c/(2)	internal innovation?
JinaKIIya /k/	/k/(2)	/c/(2)	internal innovation?
KIDakama /k/	/k/(2)	/c/(1)	internal innovation?
KINyanyeembe /k/	/k/(3)	-	-
KIKonoonɡo /k/	/k/(3)	-	-
SiGalagaanza /k/	/k/(2)	/s/(2)[61]	F23?

Such a process is not BS. More examples are shown in (103) and (104), from JinaKIIya. (In JinaKIIya, the prefix {ki-} is regularly changed to {ji-}, regardless of phonetic context, as

[61] Ambivalence of SiGalagaanza is shown by displaying both /ki/ and /si/ in PB *-kind- 'overcome' /-kiinda, -siinda/, indicating an existence of two phonological systems because of having two lexical sources.

in the name of the dialect itself: JinaKɪɪya < GɪnaKɪɪya < KɪnaKɪɪya).

(103)

ki-alo → caalo 'village, country, land' < PB *-yado 'land'
ki-eŋge → ceeŋge 'lamp'
ki-yʊga → cʊʊga 'hoof'
ki-aɲjo → caaɲjo 'nest', < -anza < PB *-yaɲja 'spread something (vt)'
ki-yoβe → cooβe 'funnel'

(104)

-kiŋgilima 'at dawn'
-kilima 'erect poles on the sides of a house as walls' makilimo (noun) 'screening poles at sides of house used as wall'
-kiindagɪla 'press something, like soil or grain to make it fit space properly'
-kiliiʃa 'smear, rub'
Nyaaŋgaki ' proper name, male'

SiSuumbwa does not spirantize when a loan is suggested, as in /-kiinda/ 'overcome'. KɪNyamweezi is generally consistent by its regular /k/ reflexes, except SiGalagaanza which suggests great external influence, possibly by loans. Even the name of the language itself shows this in the prefix, which is changed from {ki} to {si}. The likely source of this influence is SiSuumbwa due to their synchronic proximity.

Another significant word which suggests the powerful former influence of SiSuumbwa on its neighbours is /ma-kili/ 'soot' < PB *-kidi 'soot', even if useful by negative evidence only. The word is not in SiSuumbwa usage. Significantly, the reflex /makili/ is retained even in varieties like SiGalagaanza and KɪNyanyeembe which display a flair for replacing the

KINyamweezi forms with a SiSuumbwa lexeme when it is available in SiSuumbwa. The word for 'soot' in the 3 SiSuumbwa varieties is /muviila/ for SiSiloombo, /muvwiila/ for SiYoombe and /maviila/ for KiLoongo. What this suggests is that, when a word was found in SiSuumbwa, it easily replaced a similar lexeme in SiGalagaanza. If a word was not replaced in SiGalagaanza, then it was likely that that word was not in SiSuumbwa.

In KImunaSukuma, /-tiinda/ 'overcome' suggests a regressive assimilatory gesture of the coronal /d/ which spreads its place feature to /k/, thus deleting it. It is not a productive process, since it occurs only in a few words.

A comparison can be made between PB *d/l, *c and *k reflexes in F21/F22b. The irregular reflexes show a pattern which indicates regular palatalization, shown in (105):

(105)

*l → z → j
*c → s → ʃ
*k → c

*3.2.1.1.12 PB *-ku*

(106) PB *-poku 'blind (person)'

/mu-hofu/ SiSuumbwa, KIDakama, KIKonoongo
/m-oku/ KImunaSukuma, GInaNtuzu
/m-boku/ JinaKIIya
/m-pofu/ KINyanyeembe, SiGalagaanza

(107) PB *-kupa 'bone'

/i-gufwa/ SiSuumbwa
/li-guha/ KImunaSukuma
/i-guha/ GInaNtuzu, KIDakama, KINyanyeembe, KIKonooŋgo
/ɪ-guha/ JinaKIIya/
/i-fupa/ SiGalagaanza

(108) PB *-kuba 'chest'

/si-fuβa/ SiSiloombo, SiYoombe, SiGalagaanza
/ci-fuβa/ KiLooŋgo
/ʃi-kuβa/ KImunaSukuma
/gɪ-kuβa/ GInaNtuzu
/ji-kuβa/ JinaKIIya
/kɪ-kuβa/ KIDakama, KINyanyeembe
/ki-kuβa/ KIKonooŋgo

(109) PB *-kundo 'knot'

/i-guundo/ SiYoombe, KIDakama, KImunaSukuma, KINyanyeembe
/i-fuundo/ KiLooŋgo, SiGalagaanza
/ɪ-guundo/ GInaNtuzu, JinaKIIya
- SiSiloombo, KIKonooŋgo

(110) PB *-kuta 'oil'

/ma-futa/ SiSiloombo, SiYoombe, KINyanyeembe, SiGalagaanza
/ma-zuta/ KiLooŋgo
/ma-guta/ KISukuma, KIDakama, KIKonooŋgo

(111) PB *-kun(d)ʊd- 'uncover'

/-fuundukula/ SiSiloombo
/-fuundʊkʊla/ SiYoombe
/-kuundʊla/ KImunaSukuma, JinaKIIya, KIDakama
/-kunʊla/ GInaNtuzu
/-kundʊkʊla/ KINyanyeembe, KIKonooŋgo

/-vundukʊla/ SiGalagaanza
- KiLooŋgo

*Table 3.23 Reflexes, innovations, extraneous sounds and their possible sources, PB *ku*

Variety and unmarked form	*Sound/Innovation (6)*		*Possible source/comment*
	Regular	Irregular	
SiSiloombo /k/	/f/ (4)	/g/ (1)	F21/F22? (DL)
SiYoombe /k/	/f/(4)	/g/(2)	F21/F22? (DL)
KiLooŋgo /k/	/f/(3)	/z/(1), /g/(1)	F21/F22? (DL)
KɪmunaSukuma /k/	/k/(3)	/g/(3)	DL
GɪnaNtuzu /k/	/k/(3)	/g/(3)	DL
JinaKɪɪya /k/	/k/(3)	/g/(3)	DL
KɪDakama /k/	/k/(3)	/g/(3)	DL
KɪNyanyeembe /k/	/k/(2)	/f/(2), /g/(2)	F23?
KɪKonooŋgo /k/	/k/(2)	/f/(1), /l/(1), /g/(2)	DL, F23?
SiGalagaanza /k/	/k/(0)	/f/(5), /v/(1)	F23?

From *Table 3.23*, the reflexes are F23 /f/; F21and F22 /k/. This environment is one clear indication that KIsukuma does not spirantize, unless a loan word is involved. When there is an irregular form, it is a voiced counterpart of /ku/, the /gu/, which is a result of Dahl's Law (DL). It is this form which makes /ma-zuta/ in KiLooŋgo, from PB *-kuta 'oil'[62].

On the other hand, KINyamweezi sometimes shows the effects of Dahl's Law. The absence of the process in a word like PB *-poku, which is realized as /-pofu/ or /-hofu/, suggests two

[62] PB *gu > zu is treated in more detail while dealing with PB *gu in *3.2.1.1.14*

things. First, the two forms suggest a loan word from a language without Dahl's Law, which makes the form unlike that in KISukuma. Secondly, DL may not be part of KINyamweezi[63]. In this case, the word for 'blind' in KINyamweezi has two phonological features which are extraneous: absence of Dahl's Law as in SiSuumbwa, and spirantization of /k/ in front of *u to /f/, which is also a regular SiSuumbwa feature (Nurse 1979b:462, Kahigi 1988:257). The presence of /f/ in KINyamweezi suggests SiSuumbwa's influence which is observed even in KIKIImbu, possibly through KINyamweezi, where the word is /mpofu/.

Another interesting word is PB *-kupa 'bone'. Two processes are interesting in this word: SiSuumbwa shows extraneous Dahl's Law which seems to have operated first and blocked any regular spirantization to /f/ when /k/ became voiced. Neighbouring SiGalagaanza, regularizes /k/ before *u to /f/ under presumably SiSuumbwa influence, but retains /p/ instead of changing it to /h/ as in the other varieties. The *p > h process (glottalization) is regular in SiSuumbwa, and it might have been blocked in the word, since it might be a loan from elsewhere where PB *pa > fa. SiGalagaanza might have obtained the morpheme {ifupa} 'bone' from elsewhere too, possibly from KiSwahili /mfupa/. Such a form is found neither in KINyamweezi nor in SiSuumbwa. For both SiGalagaanza and SiSuumbwa, the word seems to be a loan. However, not every word with DL in SiSuumbwa (F23a/b) and KiLooŋgo (F23c) is automatically a loan, since most J languages have traces of DL, as in PB

[63] A discussion of DL is found in section **3.2.2**. Mention here is made because of the contrast between F21 and F22 in the way they show their irregular reflexes.

*-kut- 'be satiated' → /-gut-/ or PB *-kuta 'oil' → /mazuta/, /majuta/, /mavuta/.

In PB *-kuba/ 'chest', only SiGalagaanza has a form which is identical to that of SiSuumbwa, /si-fuβa/. But as pointed out above, the SiGalagaanza vowel system is 7V, and this makes any genetic affiliation suspect, despite the similarity. In addition, the data show a one-way influence, SiSuumbwa affecting SiGalagaanza more, indicating that, either some SiGalagaanza speakers have SiSuumbwa origins, or the SiSuumbwa influence on SiGalagaanza is simply more far-reaching.

Some of the irregularities in the reflexes are not clear. For instance, it is difficult to know why in SSN it is *k → g, in PB *-kundo → /-gundo/ 'knot', except in KiLooŋgo and SiGalagaanza (-fuundo). It appears nevertheless to be an SSN innovation. With these caveats, it is clear enough that SiYoombe's form is a likely loan from KɪSukuma or KɪNyamweezi, while SiGalagaanza's /-fuundo/ form suggests a SiSuumbwa origin.

*3.2.1.1.13 PB *-gi*

(112) PB *-dogi 'magic','sorcerer', 'witchcraft'

/bu-lozi/, /mu-lozi/, /βʊ-lozi/ SiSiloombo, SiYoombe
/βu-logi/, /mu-logi/, /βʊ-logi/ KiLooŋgo
/βʊ-logi/, /nogi/, /βʊ-logi/ KɪSukuma
/βʊ-logi/, /mu-logi/, /βʊ-logi/ KɪDakama
/ʊ-lozi/, /mu-lozi/, /wʊ-lozi/ KɪNyanyeembe
/u-logi/, /mu-logi/, /ʊ-logi/ KɪKonooŋgo
/βʊ-logi/, /mu-lozi/, /βʊ-lozi/ SiGalagaanza

Although only one word was available here, the regular reflex of KISukuma and KINyamweezi remains /g/, supporting earlier patterns. This reflex includes KiLooŋgo, which departs from its usual BS forms, implying a loan from KISukuma or other non-BS languages. SiSuumbwa's F23a and F23b are consistently regular with /z/[64]. Only SiGalagaanza and KINyanyeembe show an affinity with SiSuumbwa, the former being identical with SiSuumbwa, while the ambiguity of SiGalagaanza's linguistic membership shows in /βʊlogi/ 'magic'.

*3.2.1.1.14 PB *-gu*

(113) PB *-jogu 'elephant'

/n-zovu/ SiSiloombo, SiYoombe, KINyanyeembe, SiGalagaanza
/en-zozu/ KiLooŋgo
/n-zoβu/ KIKonooŋgo
- KISukuma, KIDakama

(114) PB *-gund- 'be high (of meat), rot'

/-vuunda/ SiSiloombo, SiYoombe
/-zuunda/ KiLooŋgo
/-guunda/ GInaNtuzu, JinaKIIya, KINyanyeembe, KIKonooŋgo
- KImunaSukuma, KIDakama, SiGalagaanza

Like the examples with PB *-gi above, the reflexes of PB *-gu show the clear divide between SiSuumbwa on the one hand, and KISukuma and KINyamweezi on the other, despite the lack

[64] The case of regular voiceless JinaKIIya prefixes voicing is unique in F21/F22, as in the name of the dialect itself: kI → gI → gi → ji

of sufficient data. SiSuumbwa (F23a, b) shows PB *gu > /vu/, KiLooŋgo /zu/ and KɪSukuma/KɪNyamweezi /gu/. This assumption of regular reflexes fits the general pattern of BS in F23 shown in other phonemes, or the lack thereof in F21/F22.

*Table 3.24 Reflexes, innovations, extraneous sounds and their possible sources, PB *gu*

Variety and unmarked form	*Sound/Innovation (2)*		*Possible source/comment*
	Regular	Irregular	
SiSiloombo /g/	/v/(2)	-	-
SiYoombe /g/	/v/(2)	-	-
KiLooŋgo /g/	/z/(2)	-	-
KɪmunaSukuma /g/	/g/(0)	-	-
GɪnaNtuzu /g/	/g/(1)	-	-
JinaKɪɪya /g/	/g/(1)	-	-
KɪDakama /g/	/g/(0)	-	-
KɪNyanyeembe /g/	/g/((1)	/v/(1)	F23
KɪKonooŋgo /g/	/g/((1)	/β/(1)	F23?
SiGalagaanza /g/	/g/(0)	/v/(1)	F23

Kahigi (1988) gives data which support the above regular patterns, as shown in (115):

(115)

PB and gloss	*SiSuumbwa*	*KɪSukuma*
*-gubʊ 'hippopotamus'	-vuβu	-guβʊ
*-gido 'taboo'	-zilo	-gilo
*-bido 'soot'	-viila	-βilo
*-takun- 'chew'	-tafuna	-dakuna

From the general patterns observed above, the following groups can be regarded as related, genetically or areally. The sometimes ambiguous status of SiGalagaanza is indicated by two entries in both the SiSuumbwa and KɪNyamweezi traditional groups, illustrated in (116). SiSiloombo, SiYoombe and KiLooŋgo are core BS dialects in SSN, forming a group of their own. However, KiLooŋgo departs from SiSiloombo and SiYoombe in a consistent way making it a different entity. The BS features in the rest of SSN appear to be from SiSiloombo, SiYoombe and KiLooŋgo as nearest neighbours, and therefore as likely sources, rather than as a given fact.

(116)

KɪNyanyeembe KɪKonooŋgo SiGalagaanza? ←? →	SiSiloombo SiYoombe SiGalagaanza?	KiLooŋgo	KɪmunaSukuma GɪnaNtuzu JinaKɪɪya KɪDakama

In addition, the data continue to support the contention that SiGalagaanza may either be part of SiSuumbwa, or is part of KɪNyamweezi, but is heavily influenced by SiSuumbwa because

of the irregularity of PB *gu > /vu/, instead of KINyamweezi's PB *gu > /gu/. A similar question can be asked: does KiLooŋgo really belong with SiSuumbwa if it is so consistently different? Or, how many maximal differences can be allowed to qualify two or more varieties to belong to one genetic linguistic group? These questions are attempted in section ***3.2.1.2*** by tabulating the general reflexes of SSN in the Ca, Ci and Cu environments, where C is any of the 8 target stops dealt with above.

3.2.1.2. BS in SiSuumbwa, KISukuma and KINyamweezi: Summary.

The tables below examine the reflexes in the various SSN dialects. What is noted is that, the greater frequency of reflexes does not automatically suggest regular change in language. Compared to majority counts, regular changes may be minority cases for many reasons. These regular reflexes can be recovered only by comparing the data in the other phonemes. In some cases, the native reflexes are lost, and without careful examination in other environments, inaccurate conclusions may be drawn.

Where a process like Dahl's Law is in operation, a reflex of a phoneme like PB *p being /β/ or /b/ in SSN is counted as /p/, since this change is regular and predictable, presupposing a dissimilated /p/. Hence the /βa/ or /ba/ proves the active presence of /p/ in that context at the same time. This applies to the PB *Ci and *Cu contexts as well in other phonemes where DL is relevant. In addition, most of the tables are self-explanatory because of the descriptions in one table applying to the others as well. The aim is to display patterns which have already

been discussed in the previous section in specific examples of PB reflexes in context. Due to limited cases per phoneme per environment, the tables have included all irregular and idiosyncratic instances. A rigorous sifting was not done from the beginning, although higher frequencies indicate probable regular reflexes, highlighting the dubiousness of the irregular occurrences.

*Table 3.25 Bantu Spirantization in SiSuumbwa, KɪSukuma and KɪNyamwezi *p*

Environment ➡ Dialect ↓	*PB *pa (60 cases)*	*PB *pi (6 cases)*	*PB *pu (9 cases)*
SiSiloombo	h(16), p(9), f(2)	h(2), p(1), f(1)	f(3)
SiYoombe	h(20), p(9), f(2)	h(2), p(1), f(1)	f(3)
KiLoongo	h(20), p(6), f(1)	h(3), s(1), f(1)	f(1), h(1)
KɪmunaSukuma	h(19), p(9)	ʃ(2), h(2), p(1)	f(3), h(1)
GɪnaNtuzu	h(16), p(11)	s(2), p(1), ʃ(1)	f(3), s(1), p(1)
JinaKɪɪya	h(19), p(15)	ʃ(3), p(1)	f(6), h(1)
KɪDakama	h(16), p(9)	ʃ(2), p(1), f(1)	f(4), h(1)
KɪNyanyeembe	h(12), p(12)	f(3), p(1), s(1)	f(4), h(1), p(1)
KɪKonoongo	h(12), p(13)	s(2), p(1), f(1)	f(5), h(1), s(1)
SiGalagaanza	h(13), p(15)	f(3), p(1)	f(4)

An important aspect to note in *Table 3.25* is the absence of homorganic fricatives in some of SiSuumbwa's reflexes in superclose contexts if it is claimed that the language has BS. For instance, some PB *pi change to /hi/. A plausible explanation here is the effect of chronology in phonological processes. Glottalization seems to have occurred before BS in SiSuumbwa,

resulting in blocking BS due to the bleeding effect of glottalization[65]. Those words with /t͡ʃ/ might have been borrowed later. In KISukuma and KINyamweezi the picture is that of mixed reflexes, just as it is in SiSuumbwa, reflecting a possible multiplicity of vocabulary sources (Batibo 2000:25).

*Table 3.26 Bantu Spirantization in SiSuumbwa, KISukuma and KINyamwezi PB *b*

Environment ➡ Dialect ⬇	*PB *ba (52 cases)*	*PB *bi (7 cases)*	*PB *bu (2 cases)*
SiSiloombo	β(13), b(8)	v(3), β(1)	v(2)
SiYoombe	β(21), b(3)	v(3)	v(2)
KiLooŋgo	β(19)	z(2), β(1)	z(1)
KImunaSukuma	β(25)	β(5), ʃ(1)	β(1)
GInaNtuzu	β(23)	β(5), ʃ(1)	β(1)
JinaKIIya	β(31), b(2)	β(4), ʃ(1)	β(1)
KIDakama	β(24)	β(4), f(1)	β(1)
KINyanyeembe	β(25), b(1)	β(3), v(1)	-
KIKonooŋgo	β(26)	β(3), v(1)	w(1)
SiGalagaanza	β(27)	v(2), β(1), z(1)	v(2)

Because PB *b is not affected by glottalization, the difference between /Ca/ on the one hand, and /Ci/ and /Cu/ on the other is apparent in SiSuumbwa, and to some extent in SiGalagaanza. Any double reflex suggests interference from other phonological systems. Like the reflexes in PB *p, the reflexes of *b as /b/ or /β/ can be treated as a realization of the same quality,

[65] See Batibo (2000:24-25) for a discussion of glottalization in SSN.

and the count is made accordingly. Ambiguous reflexes of PB *b include /w/ and /y/ which can be interpreted as phonological strategies of PB *b (weakening /β/ or loss /Ø/), rather than being different phonemes. In this context therefore, /b/ and /β/ are treated separately, especially because in JinaKIIya they are phonemic, whereas the /β/ in PB *p is often determined by phonetic context, and therefore a diachronic reflex of PB *p.

*Table 3.27 Bantu Spirantization in SiSuumbwa, KISukuma and KINyamwezi PB *t*

Environment ➡ Dialect↓	PB *ta (65 cases)	PB *ti (16 cases)	PB *tu (16 cases)
SiSiloombo	t(25)	s(5), t(1)	s(1), t(1)
SiYoombe	t(29)	s(6), t(3)	s(2)
KiLooŋgo	t(23)	s(3), t(3)	s(1), c(1)
KImunaSukuma	t(26)	t(7), ʃ(2), c(2)	t(6), s(3)
GInaNtuzu	t(22)	t(8), s(4)	t(9), s(1)
JinaKIIya	t(33)	t(8), ʃ(2), c(2), s(1)	t(9), s(3)
KIDakama	t(26)	t(5), ʃ(4), c(2)	t(5), s(3)
KINyanyeembe	t(27)	t(7), s(5)	t(5), s(3)
KIKonooŋgo	t(26)	t(7), s(5)	t(6), t(3)
SiGalagaanza	t(36)	s(6), t(4)	t(4), s(2), f(1)

*Table 3.28 Bantu Spirantization in SiSuumbwa, KɪSukuma and KɪNyamwezi PB *d*

Environment ➡ *Dialect /*	*PB *da* *(171cases)*	*PB *di* *(35 cases)*	*PB *du* *(20 cases)*
SiSiloombo	l(75), t(1)	z(12), l(2)	v(3), l(2), z(2)
SiYoombe	l(75)	z(11), l(2)	v(3), z(2), l(1)
KiLooŋgo	l(63), t(1)	z(11), l(2)	z(5), l(1)
KɪmunaSukuma	l(86)	j(10), l(6), d(1)	z (7), l(3), d(1)
GɪnaNtuzu	l(84)	z (6), l(6), j(2), d(1)	z (8), l(2)
JinaKɪɪya	l(123)	l(12), j(8), d(1)	z(11), l(4), d(1)
KɪDakama	l(78), d(1)	z(10), l(5)	z(8), l(5)
KɪNyanyeembe	l(71), d(1), t(1)	z(10), l(3)	z(5), l(4)
KɪKonooŋgo	l(90), d(1), t(1)	z(10), l(4)	z(6), l(4)
SiGalagaanza	l(79), d(1), t(1)	z(14), l(3)	v(4), l(3)

*Table 3.29 Bantu Spirantization in SiSuumbwa, KɪSukuma and KɪNyamwezi PB *c*

Environment ➡ *Dialect /*	*PB ca** *(35 cases)*	*PB *ci* *(9 cases)*	*PB *cu* *(8 cases)*
SiSiloombo	s (9), c(1)	s(4)	s(1), f(1)
SiYoombe	s(10), c(1)	s(3)	s(1)
KiLooŋgo	s (8)	-	-
KɪmunaSukuma	s(16), c(1)	ʃ(4), j(1)	s(1)
GɪnaNtuzu	s(12)	s(3), ʃ(2), z(1)	-
JinaKɪɪya	s(21), c(1)	ʃ(5), j(1)	s(1)
KɪDakama	s(12), c(1)	ʃ(4), z(1)	s(1)
KɪNyanyeembe	s(11)	ʃ(2), s(2), z(1)	s(1)
KɪKonooŋgo	s(11)	s(4), z(1)	s(1)
SiGalagaanza	s(9), c(1)	s(3)	s(1), f(1)

*Table 3.30 Bantu Spirantization in SiSuumbwa, KɪSukuma and KɪNyamwezi PB *j*

Environment ➡ *Dialect /*	*PB *jV* *(24 cases*	*PB *i* *(0 cases)*	*PB *u* *(0 cases)*
SiSiloombo SiYoombe KiLooŋgo	z(10) z (9) z (7)	-	-
KɪmunaSukuma GɪnaNtuzu JinaKɪɪya	z (9), ly(1), j(1) z (8), ly(2) z(11), ly(3), j(1)	-	-
KɪDakama KɪNyanyeembe KɪKonooŋgo SiGalagaanza	z(8), j(1) z(8), ly(1) z(9), ly(2) z(9), ly(2)	-	-

*Table 3.31 Bantu Spirantization in SiSuumbwa, KɪSukuma and KɪNyamwezi PB *k*

Environment ➡ *Dialect /*	*PB *ka* *(94 cases)*	*PB *ki* *(5 cases)*	*PB *ku* *(11cases)*
SiSiloombo SiYoombe KiLooŋgo	k(41) k(44), h(1) k(41), h(1)	s(1), k(1) s(1), k(1) s(1)	f(3), k(1) f(3), k(2) f(3), k(3)
KɪmunaSukuma GɪnaNtuzu JinaKɪɪya	k(39) k(39) k(60)	c(2), k(1) c(2), k(2) k(3), c(2)	k(8) k(7) k(7)
KɪDakama KɪNyanyeembe KɪKonooŋgo SiGalagaanza	k(38) k(41) k(46) k(50)	k(2), c(1) k(3) k(3) k(2), s(2)[66]	k(6), f(1) k(3), f(2) k(3), f(2) f(5)

[66] In SiGalagaanza, PB *-kind- 'overcome' is both /-kinda/ and /-sinda/

*Table 3.32 Bantu Spirantization in SiSuumbwa, KɪSukuma and KɪNyamwezi PB *g*

Environment ➡ *Dialect /*	*PB ** *(43 cases)*	*PB *i* *(1 or 3 cases?)*	*PB *u* *(2 cases)*
SiSiloombo	g(17)	z(3)[67]	v(2)
SiYoombe	g(18)	z(3)	v(2)
KiLooŋgo	g(15)	g(3)	z(2)
KɪmunaSukuma	g(26)	g(3)	-
GɪnaNtuzu	g(19)	g(3)	g(1)
JinaKɪɪya	g(31)	g(3)	g(1)
KɪDakama	g(16)	g(3)	-
KɪNyanyeembe	g(22)	g(3)	g(1), v(1)
KɪKonooŋgo	g(23)	g(3)	g(1), β(1)
SiGalagaanza	g(21)	z(2), g(1)	v(1)

The above tables include all the eligible cases, and they confirm the divisions of SSN reached in (116). While KiLooŋgo continues to be unique within F23, especially by having /z/ where F23a,b have /v/, SiGalagaanza displays a difference within F22 by resembling F23 in many reflexes. But as Kahigi (op.cit) points out, frequency of occurrence on its own is not a measure of genetic cohesion. The double reflexes in this group especially make even the small amount of data count. Although sometimes absent or even contradictory in some cases, as in the case of SiGalagaanza displaying more BS examples than non-BS, these bits of data fit the general pattern as part of the bigger picture. One of the major reason of such extraneous similarity is contact, facilitated by other factors in which speech communities of those

[67] The words used here were 'magic', 'witchcraft' and 'witch', which in Proto Bantu are expressed by one concept, *-dogi. It may be taken as one word or three depending on whether form or content is central. For the sake of SiGalagaanza, three words are preferable for capturing the double reflexes.

languages operate, such as the sociolinguistic. On the other hand, BS is only one measure. Dahl's Law in SSN may present yet another picture before the combined effect of 7 > 5, BS and DL are assessed.

3.2.2. Dahl's Law in KISukuma, KINyamweezi and SiSuumbwa

As pointed out above, in the general section, Dahl's Law is a dissimilatory process in some eastern Bantu languages whereby a sequence of two voiceless obstruents, usually stops, in consecutive syllables in a word, voices the first. The process is active only in KISukuma and KINyamweezi, while in SiSuumbwa it does not occur except in loanwords or in residual words, as is the case of DJ and EJ languages with whom SiSuumbwa possesses a close relationship.

3.2.2.1. Dahl's Law in KISukuma

The process of Dahl's Law in KImunaSukuma follows the classic pattern of voicing the first of two consecutive voiceless stop segments. While JinaKIIya behaves classically to a point, it dissimilates differently when other non-stop voiceless segments are involved, mainly fricatives like /s/ and /ʃ/. On the other hand, GInaNtuzu behaves sometimes like KImunaSukuma, and at other times like JinaKIIya, as shown in (117) and (118) for KImunaSukuma, GInaNtuzu and JinaKIIya respectively, while all three show their individual differences as well:

(117)

KɒmunaSukuma	*GɒiaNtuzu*	*JinaKɪiya*	*Proto Bantu*
ki-dikʊ	gi-dikʊ	ji-dikʊ	< *-tikʊ 'rainy season'
ma-dete,	ma-dete	ma-dete	< *-tete 'reeds'
kʊ-βɪta	gʊ-βɪta	gʊ-βɪta	< *-pɪt- 'pass'
βʊ-jikʊ	βʊ-zikʊ	βʊ-jikʊ	< *-tikʊ 'night' ?
kʊ-geeha	gʊ-geeha	gʊ-geeha	< *-keep- 'diminish, grow less'

The examples in (117) display the classic dissimilation of Dahl's Law. The only difference is the regular infinitive *kʊ- change to /gʊ-/ in GɪnaNtuzu and JinaKɪiya on the one hand, and the /j/ vs /z/, or /ʃ/ and /s/ on the other, displayed by KɪmunaSukuma and JinaKɪiya together, and GɪnaNtuzu alone, shown also in (118).

(118)

KɒmunaSukuma	*GɒiaNtuzu*	*JinaKɪiya*	*Proto Bantu*
kʊ-ʃika	gʊ-sika	gʊ-ʃiga	<*-pik- 'arrive'
lʊ-ʃikʊ	lʊ-sikʊ	lʊ-ʃigʊ	< *-tikʊ 'day'
kʊ-seka	gʊ-seka	gʊ-sega	< *-cek- 'laugh'
kʊ-gesa	gʊ-gesa	gʊ-gesa	< *-kec- 'harvest, reap'
sato	sato	sado	< *-cato 'python'
i-saka	i-saka	ɪ-saga	< *-caka 'thicket, bush'

3.2.2.1.1 Dahl's Law in KɪmuSukuma

In KɪmunaSukuma, the process does not need much comment since it has the default mechanism of voicing the first of the two consecutive voiceless stops. If the first syllable contains no stop, then DL becomes unnecessary. Out of the 44 words shown in *Table 3.6*, only 6 or 14% do not undergo Dahl's Law. These words are indicated in (119), and they have one thing in common: the initial syllable is a fricative synchronically, while only one voiceless stop consonant occupies the second syllable slot. The phoneme /h/ in haaŋʊ 'place' <*-pantʊ, also shows its true membership, since it is this phoneme only which does not undergo Dahl's Law even in JinaKɪɪya, as shown in (119) below, indicating that it does not have stop qualities necessitating dissimilation:

(119) kʊ-ʃika 'arrive' < *-pik- ; lʊ-ʃikʊ < *-tikʊ 'day'; kʊ-seka < *-cek- 'laugh'; haaŋʊ 'place' <*-pantʊ; sato 'python' < *-cato; i-saka 'thicket, bush' < *-caka.

While KɪmunaSukuma shows the unmarked form of Dahl's Law, JinaKɪɪya is located on the extreme end of the law's spectrum. The scenario in KɪmunaSukuma in which DL does not operate when a fricative is syllable-initial indicates that the change of *p → ʃ, h and *c → s is a total deletion of the CPlace and manner features of *p and *c respectively. The resulting fricatives found synchronically in KɪmunaSukuma are treated as new phonemes rather than stop derivatives when they occupy the first syllable slot. Another, more plausible and simpler explanation indicates that KɪmunaSukuma requires an initial stop only in order to trigger DL. When a stop is root-initial, the synchronic fricatives in second syllable position trigger DL,

as shown in (120). When /s/ or /ʃ/ are initial, as in (119), then no DL occurs because there is no target /p, t, k/ as default triggers.

(120)
/-gesa/ < PB *-kec- 'harvest'
/-guusa/ < PB *-kuc- 'rub'

(121)
/-βisa/ (Lenition) < *-bisa (DL) < PB *-pic 'hide'
/-βasa/ (Lenition) < *-basa (DL) < PB *paca 'twin'

When (119) only is used, the words seem to indicate that when Dahl's Law started the /ʃ/ and /s/ were already established as independent phonemes in KɪmunaSukuma. If Dahl's Law had applied much earlier, the fricatives would not show up in those words, and regular DL would operate. For instance, PB *-caka would be /i-jaga/ in KɪmunaSukuma rather than /i-saka/. The earlier occurrence of palatalization or *b and *c lenition is not convincing, since it is contradicted when (120) and (121) are compared with (119). A better explanation is that the words failing to undergo DL like those in (119) are affected by the bleeding effect of a preceding process like palatalization. When the dialects diverged, DL began to operate differently. This difference of DL operation suggests a long period of separation between KɪmunaSukuma and JinaKɪɪya for the two to treat the same words differently with regard to Dahl's Law.

In (121), chronology indicates that Dahl's Law started, and then PB *c and *b lenition

followed as a regular reflex: PB *p → b → β. The process is not *p → β because /b/ remains unaccounted for. Because of this chronology, it is important to distinguish the operation of Dahl's Law and lenition in /-βisa/ and /-βasa/. The /β/ is from /b/ rather than directly from /p/.

3.2.2.1.2 Dahl's Law in JinaKɪɪya

Of the 51 words, 49 undergo Dahl's Law in JinaKɪɪya. Because of this high number of cases undergoing the process, there are two things to note. Firstly, JinaKɪɪya dissimilates classically like KɪmunaSukuma. But in JinaKɪɪya, if one of the voiceless segments is not a stop, then the stop is voiced, regardless of its second position. Secondly, JinaKɪɪya also consistently voices all prefixes with voiceless stops as a morphologized feature, like the infinitive marker kʊ-.

(122)

na	tʊ	kʊ	pep	a	→	na	dʊ	gʊ	bep	a
1s	*neg*	*2s*	*mislead*	*sufx*		*1s*	*neg*	*2s*	*mislead*	*sufx*
tʊ	tɪ	naa	kop	a	→	dʊ	dɪ	naa	gop	a
1p	*neg*	*pres*	*borrow*	*sufx*		*1p*	*neg*	*pres*	*borrow*	*sufx*
βa	ta	laa	laal	a	→	βa	da	laa	laal	a
3p	*neg*	*futfar*	*sleep*	*sufx*		*3p*	*neg*	*futfar*	*sleep*	*sufx*

natʊkʊpepa → nadʊgʊbepa 'I will not mislead you'
tʊtɪnaakopa → dʊdɪnaagopa 'We have not borrowed'
βatalaalaala → βadalaalaala 'They will never sleep'

Other morphemes which have been morphologized are the second person tʊ- which becomes dʊ- and negative marker -ta- or -tɪ-, which become -da- or -dɪ-as permanent features. This point is illustrated well with the examples in (118) and (122).

The exceptions to Dahl's Law in JinaKɪɪya are two out of 51 words, the percentage of occurrence of Dahl's Law being 96%. These two exceptional words are:

(123)
haaɲʊ 'place' < *-pantʊ
sʊha 'calabash' < *-cʊpa

These two words raise one question: why only these two out of 51? The answer strongly suggests a semantic strategy where homophonous words are dissimilated phonologically to avoid polysemy.

(124)

PB *cʊ́pà 'jar, calabash bottle'

jʊ̀bâ 'bottle' < KiSwahili cupa 'bottle'
sʊ̀hǎ 'calabash'

-sʊ̀bà 'worry, hesitate'
-jʊ̀bǎ 'walk or run in rain, soaked in water'
-sʊ̀bʊ̀lâ 'dip a bolus of food in (meat) soup'

PB *-pantʊ 'place'

haaɲʊ 'place'
βaaɲʊ 'people'

The dissimilated words can be minimal pairs except for one element, in this case, the change of a stop to /h/. Other devices are used, including tonal distinction and borrowing. Speech context is also used where the strategies are exhausted and two words remain identical. The words in (124, 126) are all extant in JinaKIIya, indicating that the semantic strategy is aided greatly by borrowing. In this sense, glottalization offers a rich source of new vocabulary. These words are not purely minimal pairs, but they suggest the parallel presence of /h/ and /p/ or /b/ as an indication of interference from another phonological system. Although /h/ is a fricative, like /s/ or /ʃ/, it does not trigger DL even in JinaKIIya. This explains why there is no DL in PB *pantʊ 'place'. In JinaKIIya, the word for 'place', haaṇʊ, is also haleβe. DL applying to PB *pantʊ would have given /bantʊ/ where βaaṇʊ 'place' would be homophonous with βaaṇʊ 'people'. Where there is homophony, there is almost always a way of avoiding it, including the failure of a law like DL to operate, or borrowing.

3.2.2.1.3 Dahl's Law in GIInaNtuzu

GIInaNtuzu occupies a middle position in that it behaves like KImunaSukuma in some respects and like JinaKIIya in others, while a third pattern is established by its own unique features. It undergoes the process by 39 out of 45 words, or 87%, while KImunaSukuma is 86% or 38 out of 44 words. This places them on the same node for Dahl's Law, since even the 6 divergent words in GIInaNtuzu are exactly the same as in (119) above. For instance, GIInaNtuzu's Dahl's Law does not respond to fricative sounds like /s/, as in /isaka/ 'thicket, bush', which is like KImunaSukuma /isaka/. On the other hand, GIInaNtuzu has generally

morphologized the infinitive marker kʊ- to gʊ- like JinaKIIya as illustrated in (122). Can this have been a borrowed feature from Southern Nilotic, where in that language group, *k > g (Ehret 1971:100)? This strengthens the notion of centre and periphery since in this case the populations speaking JinaKIIya and KImunaSukuma are bigger than those speaking GInaNtuzu. These big populations create around themselves larger protective peripheries or shells[68] which ensure that the core remains relatively intact during contact with other varieties, including inter-dialectal contact.

Using the linguistic tree metaphor for the three dialects of KISukuma, JinaKIIya would be farthest from the root of proto KISukuma, because of the more far-reaching changes of Dahl's Law from the version of the law that affects /p, t, k/ only. GInaNtuzu would follow as a more conservative version, while KImunaSukuma is the most conservative of the three.

3.2.2.2. Dahl's Law in KINyamweezi

In KINyamweezi the rule is described as an almost exceptionless root structure condition in which, when two adjacent syllables in a stem both start with a voiceless plosive, the first one becomes voiced (Maganga and Schadeberg 1992:23). The syllable structure of a root with two adjacent voiceless consonants is not found synchronically in KINyamweezi because of this root structure condition. When either two of the following are in adjacent syllables, the

[68] This metaphor of 'shells' protecting the inner centre was brought to my attention and illustrated by Nurse as an appropriate inference (p.c)

first must be voiced: /p, t, k, f, h, mh (m̥), nh (n̥), ŋh (ŋ̊)/ where either one occupies C_1 or C_2, with the following structure: $C_1V(V)C_2(V)$.

A few exceptions to this condition are the following, which are attributed to inter-dialectal borrowing (Maganga and Schadeberg (ibid:24):

(125)

-heha 'winnow' vs -beha 'smoke (tobacco) (genuine exception)
-hofu 'blind' vs -boku 'blind' (KISukuma)
teetele 'indeed' vs teletele (original form of teetele)
mpaka 'until' vs mpaka 'until' (KiSwahili)

The second and fourth examples -hofu 'blind' and mpaka 'until' clearly suggest borrowed words from languages without Dahl's Law. The third, teetele 'indeed' indicates that one /t/ was lost, although the syllable was not, and therefore Dahl's Law does not apply because the root structure is well-formed.

Of these, -heha 'winnow' and -beha 'smoke (tobacco)' are more interesting. The alternation suggests the possibility of a lexical technique of semantic distinction so as to avoid homophony, as observed for KISukuma. This JinaKIIya case illustrates the technique:

(126)

PB *-pep- 'blow, winnow'

-bèpă 'seduce and mislead a close friend/or follower, by deception (blow mentally)'
-bèhă 'smoke (tobacco, medicinal leaves, marijuana, etc)'
-hèhă 'winnow' (would expect -beha < PB *-pep-)
-hèèhà '(of the sun), be on the western horizon and be less burning, with gentle breezes'

pèèhà* (the word does not occur, and therefore -hèèhà is regular)

PB *-pod- 'cool down, get cured'

-pòlă 'cool, be calm'
-hòlă 'be peaceful, without disease or war'

If these cases of homophony avoidance are taken into account, it becomes true that KINyamweezi (in fact this refers to KIDakama only), like KISukuma, especially KImunaSukuma, makes no exceptions to classical Dahl's Law where it occurs.

On another note, the KINyamweezi referred to by Maganga and Schadeberg (1992) is the KIDakama variety which agrees with that analysis. The other varieties, notably SiGalagaanza, KIKonoongo and KINyanyeembe display more exceptions than regularities, as shown in *Table 3.6* above. These dominant exceptions can be interpreted as internal linguistic dynamics, or external loans. The questions to be asked include: (a) Did SiGalagaanza, KIKonoongo and KINyanyeembe once have DL, but replaced many words with DL by loans which did not have DL? (b) Were SiGalagaanza, KIKonoongo and KINyanyeembe once without DL but borrowed many words with it? The first explanation is possible, but unlikely because there is no motivation, while the second is more plausible.

3.2.2.2.1 Dahl's Law in KɪDakama

Dahl's Law in KɪDakama is very similar to that in KɪmunasukuMa because both follow essentially the same rules of classical Dahl's Law, unless they are interfered with by loans, dialect-specific innovations or homophones. A few examples illustrate this in (127):

(127)

KɪDakama	*KɪmunaSukuma*	*Gloss*
kʊ-daha	kʊ-daha	'draw water' < *-tapa
i-datʊ	i-datʊ	'three' < *-tatʊ
lʊ-ʃikʊ	lʊ-ʃikʊ	'day' < *-tikʊ
i-saka	i-saka	'thicket, bush' < *-caka
i-dako	i-dako	'buttock' < *-tako
mu-hofu	moku	'blind person' < *-poku
mu-gaate	ŋ-gaatɪ	'bread' < *-kaate

3.2.2.2.2 Dahl's Law in KɪKonooŋgo and KɪNyanyeembe

Of the 44 Dahl's Law sample words, only 21 or 48% undergo the process in KɪKonooŋgo, and 18 words or 44% in KɪNyanyeembe. The majority of the words at 52% and 56% respectively do not undergo Dahl's Law. As dialects of a language which are "expected to have" Dahl's Law, such a low percentage of expected behaviour and a conversely high percentage of irregular features represents a marked situation. For a full list of these exceptional words, see *Appendix 6*. Examples of words which do not undergo Dahl's Law, include the following common predictable ones. They are also compared with those from

KɪNyanyeembe and SiGalagaanza, within the KɪNyamweɛzi group, and then with SiSiloombo, from SiSuumbwa. KɪSukuma and KɪDakama follow the classical pattern:

(128)

Gloss	*Konooŋgo*	*Nyanyeembe*	*Galagaanza*	*Siloombo*	*Proto Bantu*
'three'	idatɔ, itatɔ	i-datɔ	i-tatɔ	i-satu[69]	< *-tatɔ
'be satiated'	-ikɔta	-ikɔta	-ikɔta	-ikuta	< *-yikɔt-
'abscess, boil'	i-pute	-	-	i-hute	< *-pute
'headpad'	ŋ-kata	-	ŋ-gata	ŋ-kata	< *-kata
'chicken'	ŋ-koko	ŋ-koko	ŋ-koko	ŋ-koko	< *-koko
'shiver'	kɔ-tetema	kɔ-tetema	kɔ-tetema	-	< * -tetɪm-

The picture in (128) suggests that, KɪKonooŋgo and KɪNyanyeembe had a different historical development from that of KɪDakama, a variety grouped in KɪNyamweezi. The KɪKonooŋgo and KɪNyanyeembe picture is actually very similar to that of SiSiloombo, although where they differ, the difference is significant too. For instance, the words for 'three' and 'abscess, boil', which are /i-satu/ and /i-hute/ in SiSiloombo suggest that KɪKonooŋgo might not have been in contact with SiSiloombo, since its reflexes are /itatʊ, idatʊ/ and /ipute/ respectively. In other words, the interpretation of the data from KɪKonooŋgo and KɪNyanyeembe may be viewed in terms of an independent development.

---

[69] This word may be from PB *-catʊ rather than from PB *tatʊ, and therefore they are not cognate.

The existence of two forms for 'three' in KIKonoonjgo also suggests that Dahl's Law and non-Dahl's Law phonetic realizations may be in free variation so that intra-informant variations might make such a phenomenon more noticeable if informant samples were larger. Internally, it might be a case of innovation by strengthening the once voiced stops, although the motivation may be difficult to establish. Otherwise, the weak presence of DL indicates that KIKonoonjgo and KINyanyeembe have borrowed massively from languages without Dahl's Law surrounding them like KIKIImbʊ, KiBende, ICIWʊʊŋgʊ and possibly SiSuumbwa.

Such an ambivalent status in KIKonoonjgo and KINyanyeembe may also be explained in terms of sociolinguistic factors (Thomason and Kaufman 1988). These speech communities might have been KIKIImbʊ speakers in the past but were absorbed by F22 and adopted KINyamweezi. Although this is a plausible scenario, it needs some more evidence to validate it. For instance, Brock (1968:58) talks of the naming tradition of languages which is only a recent phenomenon. Modern Bantu languages became frozen and petrified when they began to be named, located and confined in prescribed spaces. For instance, the histories of KIKIImbʊ and KInILaamba by Shorter (1968a), and Kidamala (1961) respectively say that the speakers came from different places. Some KIKIImbʊ speakers came from Usuumbwa (SiSuumbwa country) and Usagara in Morogoro. This is a great possibility since the movements in the past were much easier and more regular because they were not restricted by political boundaries or ethnicity. Such ethnic or political boundaries were not important

enough to restrict movements and mixing with speakers of different languages or dialects. What we try to capture now is only a fraction of what was happening only a short while ago with that volatile situation of free-mixing speech communities. The origins of the various Bantu clans, groups, and peoples are only recalled when they are recent enough to be fresh in the communities' collective memory from their most recent journeys, events and their great people. Such narratives are normally presented as if there were no great people or history before them.

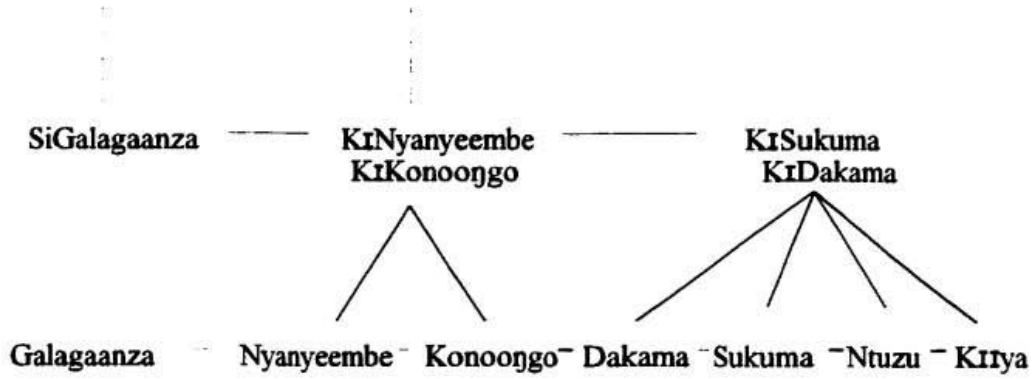
3.2.2.2.3 Dahl's Law in SiGalagaanza

As (128) and *Table 3.6* show, SiGalagaanza has more exceptions than regular Dahl's Law forms. Out of 42 words, only 12 or 29% undergo Dahl's Law. This number of exceptions is the same as in KiLooŋgo, which has 29% of its sample undergoing the process. Due to geographical proximity and probable linguistic closeness, KiLooŋgo was assumed to belong to SiSuumbwa in this study, a language which has no Dahl's Law. The reason for assigning KiLooŋgo to SiSuumbwa was partly because it was not yet classified.

The arguments for more exceptions here are similar to those advanced for KIKonooŋgo and KINyanyeembe, but the difference may be the numbers. SiGalagaanza behaves more like a language without Dahl's Law, as if those few words were acquired only through borrowing from mainly DL languages like KIDakama or KISukuma.

On the other hand, if the 71% non-Dahl's Law words are interpreted as possibly acquired by contact, then it can be explained as the intensive model of contact-induced borrowing (Thomason and Kaufman (1988:50). In this kind of borrowing, intensive contact with bilingualism is expected among the speakers of the borrowing language or variety, extended over a long period of time. Here, there is heavy lexical borrowing and moderate to heavy structural borrowing as well. If the candidate for that donation is SiSuumbwa., KiBende or another language, an examination of that language is essential, although the structural part of borrowing is outside the scope of this work. In Chapter 4, there are some indications that SiGalagaanza shares a few significant vocabulary items with both SiSuumbwa and KiBende. And since they are all Bantu languages, a phonological process such as Dahl's Law could be applied to lexical loans. Dahl's Law used as a classification tool results in the dialects of KISukuma and KINyamweezi grouped as in (129).

(129)



3.2.2.3 Dahl's Law in SiSuumbwa

As the data in *Table 3.6* show, Dahl's Law in SiSuumbwa is distributed as follows: 10 words out of 58 in KiLoongo; SiSiloombo 4; and SiYoombe 5 words. The fewer number of words undergoing the process raises questions of how can such a skewed exception be explained in a language which had supposedly undergone Dahl's Law.

On closer examination, the words undergoing Dahl's Law are limited to a set of loanwords which can be counted and accounted for. Most are from either KISukuma or KINyamweezi, while two are from Zone EJ. All DJ and EJ languages have at least a few items with DL, for example 'oil' is either /majuta/, /mazuta/ (EJ) or /mavuta/ (DJ). So, these few items in SiSuumbwa and KiLoongo are inherited from DJ/EJ. Since genetic affiliation is either present or absent, SiSuumbwa belongs within SSN or it does not.

Table 3.33 Dahl's Law in SiSuumbwa

Word	*Found in*	*Possible source*	*Explanatory notes and expected lexeme in brackets*
-gufwa <*-kupa 'bone'	SiSiloombo SiYoombe KiLooŋgo	KɪSukuma, KiɪNyamweezi Zone EJ?	-guha (why not -kuha?) -guf(w)a (Zone EJ, e.g. RuKereβe, Runyalhaŋgiro)
-zuta <kuta 'oil'	KiLooŋgo	Zone EJ	-juta (kuta)
-syaabo, -saabo, -saaβo <*-capo 'calabash'	SiSiloombo SiYoombe	JinaKiiya	the only variety which dissimilates non-initial stops, instead of being -saho
giiti < *-kɪti 'darkness'	SiYoombe	KɪSukuma, KɪNyamweezi	giiti (kiti)
eeŋ-kogoto < *-koko 'crust'	KiLooŋgo	?	It is doubtful if this word is cognate with *-koko
gʊʊkʊ < *-kʊʊkʊ 'grandfather'	SiSiloombo	KɪSukuma, KiɪNyamweezi	gʊʊkʊ (kuuku)
guuku	SiYoombe, KiLooŋgo	KɪSukuma, KiɪNyamweezi	gʊʊkʊ (kuuku)
eŋgata[70] <*-kata 'headpad'	KiLooŋgo	KɪSukuma	ŋgata (ŋkata)
-bisa, -βisa < *-pic- 'hide'	SiSiloombo, SiYoombe	KɪSukuma, KɪNyamweezi	-βisa (-fisa/hisa)
ku-gesa < *-kec- 'reap'	KiLooŋgo	KɪmunaSukuma	kʊgesa (kukesa)
madete < *-tete 'reed'	KiLooŋgo	KɪSukuma, KɪNyamweezi	madete (matete)
muβeho	KiLooŋgo	KɪSukuma	-βeho, mbeho (mpeho)
-gufu <*-kupɪ 'short'	KiLooŋgo	KɪSukuma, KɪNyamweezi	-guhɪ (-kuhi)

[70] Muzale (1998:93-4) mentions that Dahl's Law in Rutara is not productive, because it occurs in a few words only. It is informative to note that he also mentions two words eŋgata 'headpad' and -gufi/-gufu 'short' as examples of the few traces of this Law. These words appear only in KiLooŋgo.

Because the facts of SiSuumbwa suggest strongly that it has disproportionately few cases of Dahl's Law in the same words, it is also implied that it does not share any immediate ancestry with all the KISukuma varieties and KIDakama. From this, Dahl's Law is essentially a process that affects all KISukuma dialects plus KIDakama. The evidence suggests it has

(130)

SiSuumbwa		KiLoongo	SiGalagaanza	KINyamweezi	KISukuma			
F23a	F23b	F23c	F22d	F22a	F22e	F22b	F21a	F21b	F21c

diffused via loanwords into adjacent languages. Graphically, a family tree for these three languages would show branches which are not joined by a common stem, as in (130). In other words, such a tree has hanging branches without any roots.

3.2.3 Other processes in SiSuumbwa, KISukuma and KINyamweezi

One prominent process distinguishing these languages is the appearance and evolution of voiceless nasals. In KISukuma[71], and KIDakama this process entails a mechanism whereby some prenasalized voiceless stop consonants lose their place features, leaving only their voicelessness, resulting in voiceless nasals which spread to become homorganic with the lost

[71] In KISukuma, particularly in JinaKIIya, the nature of voiceless nasals is not explored fully, since it is not immediately relevant. A survey of some initial voiceless nasals and their description in JinaKIIya is attempted in Masele (1996).

stop, as in *Table 3.34* below from KImunaSukuma, JinaKIIya, GInantuzu and KIDakama examples, compared with KINyanyeembe, KIKonooŋgo, and SiGalagaanza.

As the table suggests, the voiceless nasals are found only in four varieties, KImunaSukuma, JinaKIIya, GInantuzu and KIDakama. As a significant process for this group for diagnostic purposes, voiceless nasals reconfigure the group into the same three divisions, but with adjusted membership. Combined with other features, such a reconfiguration suggests linguistic validity.

Table 3.34 Voiceless nasals and linguistic sub-grouping in SiSuumbwa, KISukuma and KINyamweezi

Proto Bantu ⇨ Variety ⇩	*N-pamba 'provision'	*N-tɑiga 'giraffe'	*mu-Ntu 'person'	*N-kaŋga 'guinea fowl'
SiSiloombo	mpaamba	ntwiiga	muuntu	ŋkaaŋga
SiYoombe	mpaamba	ntwiiga	muuntu	ŋkaaŋga
KiLooŋgo	mpaamba	entwiiga	muuntu	eŋkaaŋga
KImunaSukuma	m̩aamba	n̩wIIga	muun̩ɔ	ɲaaŋga
GInantuzu	m̩aamba	n̩Iga	muun̩ɔ	ɲaaŋga
JinaKIIya	m̩aamba	n̩Iga	muun̩ɔ	ɲaaŋga
KIDakama	m̩aamba	n̩wiiga	muun̩ɔ	ɲaaŋga
KINyanyeembe	mpaamba	ntwiiga	mɔɔntɔ	ŋkaaŋga
KIKonooŋgo	-	nwiiga	muuntɔ	ŋkaaŋga
SiGalagaanza	mpaamba	ntwiiga	muuntu	ŋkaaŋga

3.2.4. Homogeneity between SiSuumbwa, KISukuma and KINyamweezi

With regard to the four phonological processes used to trace the divisions within SSN, only traditional KISukuma remains undisturbed, although a dialect is added to it, making it incomplete as well. This new KISukuma (or KISukuma2) is supported favourably by DL. DL isolates KINyanyeembe, KIKonooŋgo and SiGalagaanza as the core KINyamweezi group, and BS isolates SiSuumbwa away from SSN. Such affiliations support the suggestion in (116) and (130), although the memberships of SiGalagaanza and KiLooŋgo are not clear. Each of the three reconfigurations has its own internal sub-divisions.

To refine the sub-divisions within SSN, the following test targets SiSuumbwa and KiLooŋgo to see if they can fit in within the surrounding linguistic groups in DJ, EJ or F. This is illustrated in *Table 3.35.*

Table 3.35 Comparison of Zone D:DJ, and EJ languages with KiLooŋgo, SiSuumbwa and *JinaKIŋya* (Some data from Guthrie 1967-71, Nurse 1979, Schoenbrun 1997, mutatis mutandis)

Feature or Process	*F23a,F 23b Suum*	*F23c Looŋ*	*EJ14 Ciga*	*D41 Koon*	*DJ51 Huun*	*DJ61 Rwan*	*DJ63 Fuli*	*EJ25 Jita*	*F21c Suk*
pa/e/o/ɪ/ʊ	h	h	h	h	h	h	h	Ø	p
pi	h	h	h	h	h	ʃ	h	Ø/s	p
pu	f	?	f	?	?	f	?	s?	p
mp	mp	mp	mp	mp	?	mp	mb	mb?	m̥/mh
ba/e/o/ɪ/ʊ	b~β	b~β	β	β	b	β	b~β	β	β
bi	v	z	z	?	?	b	?	b	β
bu	v	z	z	β	f/pf	v	v	f	β

Feature or Process	*F23a,F 23b Suum*	*F23c Looŋ*	*EJ14 Ciga*	*D41 Koon*	*DJ51 Huun*	*DJ61 Rwan*	*DJ63 Fuli*	*EJ25 Jita*	*F21c Suk*
mbu	mv	nz	nz	mb	mf	mv	mv	f	mb
ta/e/o/ɪ/ʊ	t	t	t	t	t	t	t	t	t
ti	s	s	s	?	?	s	?	s	t
tu	t/s	s/c	c	?	?	pf	?	s	t
nt	nt	nt	nt	nd	nd	nt	nd	n	n̩/nh
da/e/o/ɪ/ʊ	l	l	l	l	l	l	l	l	l/d
di	z	z	z	l	ts	z	z	s	l/d?
du	v/l	z/l	j~z	r	pf	v	d?	f	l/z?
ca/e/o/ɪ/ʊ	s	s	s	s	s	s	ʃ	s	s
ci	s	?	s	?	ʃ	s/ʃ	ʃ	s	s
cu	s	s?	ʃ	?	?	s	?	s?	s
nc	ns	ns	ns	ns	ɲʃ	ns	ns	ns	ns
ja/e/o/ɪ/ʊ	z	z	z	z	c	z	z	j	j?
ɲj	nz	nz	nj	nz?	ɲc?	nz		nj	ɲj?
ka/e/o/ɪ/ʊ	k	k	k	k	k	k	k	k	k
ki	s	s?	s	c	ts	ts	c	s	k
ku	f	f	j	k	pf	pf	f	f	k
ŋk	ŋk	ŋk	ŋk	ŋk	?	ŋk/ŋ	ŋk/ŋ	ŋ	ŋ̊
ga/e/o/ɪ/ʊ	g	g	g	ɣ	g	g	g	g	g
gi	z	g?	g	?	?	z	?	s	g
gu	v	z	j	?	?	v	?	f	g
Vowels	5LS	5LS	5LS	7LS	7LS	5LS	5LS	5LS	7LS
Dahl's Law	-	-	-	-	-	+	+	+	+
BS	+	+	+	-	?	+	?	+	-

F23a,b = SiSuumbwa, F23c = KiLooŋgo, EJ14 = RuCiga, D41 = RuKoonzo, DJ51 = KiHuunde, DJ61 KinyaRwanda, DJ63 = iKiFuliiru, EJ25 = eCiJiita, F21 KɪSukuma (JinaKɪɪya (F21c)), 5LS/7LS = five or seven vowels, of both long and short quality, ? = insufficient data/information.

In *Table 3.35* above, the double reflexes in JinaKIIya (F21c) suggest mixture of phonological systems due to contact as reciprocal borrowing with interacting speakers of different languages. For instance, this explains the presence of traces of Dahl's Law or Bantu Spirantization in languages like KIKIImbʊ which did not undergo such processes. But since their neighbours did, they borrowed some words, and one finds words like /idooke/ 'banana' < KIDakama /idooke/ < PB *-tooke. The same can be said of Dahl's Law in SiSuumbwa and Bantu Spirantization in JinaKIIya. Glottalization is not native in KImunaSukuma for words like /-hya/ 'new', /-hyaagʊla/ 'sweep'. They appear as /-pya/ and /-pyaagʊla/ respectively in JinaKIIya, KIDakama, KINyanyeembe, KIKonoongo and SiGalagaanza, strongly suggesting that they are loans in KImunaSukuma and in F21/F22 generally rather than frozen processes. Similar phonological processes which appear to have operated in the past and then stopped can be explained this way, just as Batibo (2000:25) observes. For SiSuumbwa (F23a, F23b), borrowing from Zone DJ60 (Western Highlands) or EJ10/20 (Rutara) languages is not plausible enough, since the evidence is overwhelming. The most probable explanation is genetic affiliation, especially with DJ60. Although DJ60 has DL, within it, some like one variety of GiHa (DJ66) do not show it (Muzale 1998). Internally, therefore, SiSuumbwa may not necessarily be immediately affiliated with DJ60 (like KinyaRwanda or KiRundi). It may be closely related to another unknown DJ language, since not all DJ languages are well known. With the available data, SiSuumbwa fits well with DJ60.

On the other hand, KiLoongo shows a stronger phonological affinity with the Rutara group than with SiSuumbwa. This is illustrated well with KiLoongo words like /enzozu/ 'elephant', /izu/ 'ashes' from *-jogu and *-bu respectively, which are /njovu/ and /ivu/ in SiSuumbwa. Respectively, these are /enjojo/ and /eizu/ in RuCiga, indicating genetic relationship which is not contradicted by other data. Non-native reflexes in KiLoongo can be easily traced and explained.

After examining the examples and patterns above, two conclusions can be drawn. First, the inherited Proto Bantu words in KISukuma and KINyamweezi show regular reflexes in many cases. Although sometimes native reflexes are completely missing, the general pattern discounts 7>5 and BS. Only loan words show BS in both KISukuma and KINyamweezi. Secondly, within SSN, the chronology of glottalization, 7>5/BS, DL and voiceless nasalization support the idea of historically, and therefore genetically, different routes taken by the SiSuumbwa, KINyamweezi and KISukuma dialects as their speech communities evolved differently, though sometimes concurrently. The two conclusions above suggest that any large sample of informants or words from SSN would support this hypothesis. In this study, for instance, the three informants for SiSiloombo and SiYoombe on the one hand, and KiLoongo, on the other, were less than 30 years old, although older than 20. Much older informants would show less interference from other languages to support consistently Kahigi's (1988:267-8) diachronic prehistory of SiSuumbwa:

(131)

PB *p, t, k > f/_u; PB *b > v/_i
PB *g, d, g > v/_u; PB *p > f/_i

3.2.5 Relative Chronology in SiSumbwa, KISukuma and KINyamwezi

Chronology of phonological processes in SSN suggests that these languages might have started as separate entities and then converged in adjacent areas at some point. In the convergence, some features from each were diffused to the others depending on their geographical location and direction of physical and social movement of the speakers.

Time	→ ↘ →					2000 AD →
Process	DL	LENIT	GLOTT	BS	7 > 5	N[-voice]
Group 1	F21, F22b	F21, F22	-	-	-	F21, F22b
Group 2	?	F22a, F22d, F22e		-	-	-
Group 3	-	-	EJ20, F23	EJ20, F23	EJ20, F23	-
Some examples	*-tatɑ > -datɑ *-kec- > - gesa *-piti > -biti	*ci > s/ʃ *b > β	*p > h	*gu>vu - *piti >-fisi	-satu	*mp > m̥ *nt > n̥ *ŋk > ŋ̊

[DL = Dahl's Law; LENIT = Lenition; GLOTT = Glottalization; BS = Bantu Spirantization; 7 > 5 = Vowel reduction from 7 to 5; N[-voice] = Voiceless nasal formation]. The sequence of processes is DL-LENIT/GLOTT-BS/7 > 5-N[-voice]

Figure 3.1 Relative chronology of phonological processes in SSN

The evidence for this chronology can be observed by looking into some features in each individual language, since the languages appear to have developed differently. In SiSuumbwa, for example, PB *pi does not change into the expected spirant like /f/ because of the chronology of the events. Glottalization occurred first in most of the PB *pi words and /h/ blocked the effect of BS in them. This blocking process of /h/ can be possible only if glottalization first appeared in the *pi environment, and while it was in progress in the rest of the superclose vowel environments, BS began. This explains the total absence of BS in that environment, except in later borrowings[72]. In non-*pi contexts, BS is present. Why BS did not start in PB *pi but elsewhere like in PB *ti, *tu, *ki , *ku is partly a phonetic question. In the articulation of PB *pi, the front part of the tongue is lowest in the buccal cavity, touching the lower teeth, making the PB *i in *pi less [+consonantal] because it is farthest from the hard palate. The tongue height is highest elsewhere, almost touching the hard palate, causing frication. In addition, glottalization does not occur in other environments. In SiSuumbwa, glottalization is a regular phonological change which is parallel to PB *c and *b in KISukuma or KINyamweezi. In KISukuma and KINyamweezi palatalization was probably triggered by contact with BS languages, since some words in an identical environment do not palatalize.

On the other hand, Dahl's Law in KISukuma predated all other changes in the language. This

---

[72] In forms like PB *-kopi 'flat of hand', SiSuumbwa has /-kofi/ in contrast to forms like PB *-pik- 'arrive' which is /-hika/. The former is a likely loan from KiSwahili, while /-hika/ is inherited from PB.

can be tested by words like PB *-paca 'twin', *-pɪt- 'pass', *-pic- 'hide' as shown in (132), which is compared to SiSuumbwa. Any deviation from DL as a first rule to apply in a word in F21/F22b is likely to be an external influence.

(132) PB *-pantʊ, *-paca 'twin', *-pɪt- 'pass', *-pic- 'hide', *-piga 'hearthstone, *-pik- 'arrive'

PB → Process .		*-pantʊ 'place'	*-paca 'twin'	*-pɪt- 'pass'	*-pic- 'hide'	*-piga 'hearth stone'	*-pik- 'arrive'
1.	F21	-	-basa	-bɪta	-bica	-?	-?
DAHL'S LAW	F22	-	-	-	-	-	-
	F23	-	-	-	-	-	-
2.	F21	haṇu?[73]	-βasa	-βɪta	-βisa	-higa?[74]	-?
LENITION *c>s, *b>β, *p>h	F22	pantʊ	-	-βɪta?	-βisa?	-	-
	F23	hantu	-hasa	-hita	-βisa?	-higa	-hika
3 PALATAL	F21	-	-	-	-	-ʃiga?[75], -siga?	-ʃik/ga? -sika
	F22	-	-	-	-	-figa?	-f/sika
	F23	-	-	-	-	-	-

For example, when Dahl's Law fails to operate in KɪSukuma and palatalization takes precedence, it indicates a borrowed word or a change triggered by contact. The voiced

[73] KɪDakama (F22b) has a form here.

[74] KɪmunaSukuma

[75] JinaKɪIya/KɪmunaSukuma have /ʃ/, GɪnantuzU /s/ and KɪNyamweezi, including KɪDakama /f/. In PB *-pik 'arrive', KɪDakama has /ʃ/, KɪKonooŋgo /s/.

counterpart of /p/ is /b/ not /β/ as is the case with PB *-paca > -βasa. A stage. DL . is skipped when lenition is posited as the first process to have occurred. According to the evidence, DL was the first, followed by the lenition of PB *c and *b: *-paca > -/basa/ (DL) > /-βasa/ (Lenition). In SiSuumbwa, that lenition was glottalization.

It is clear from the above examples that palatalization in KISukuma and KINyamweezi is a later development which was not complete because it was not native. It came after DL. Forms like PB *-pic- 'hide', *-piti 'hyena' being /-βisa/ and /-βiti/ suggest the normal lenition route, especially in KISukuma, by the DL > LENITION > PAL path, rather than PB *-pik- > /-ʃika/ or /-sika/ which skips DL completely without any justification[76]. The lenition of PB *b to /β/ in KISukuma, for example, is regular, expected when there is phonemic contrast between /b/ and /β/. If /-ʃika/, /-sika/ or /-fika/ are not marked in KISukuma and KINyamweezi, then PB *-piti and similar words would have a fricative which would effectively block DL in KImunaSukuma, GInantuzu and KIDakama, except in JinaKIIya. With palatalization taking precedence over DL, PB *-pic- 'hide', *-piti 'hyena' for example, would be /ʃisa/, /-sisa/ or /-fisa/ 'hide' and /ʃiti/, /-siti/ or /-fiti/ respectively, which they are not. This anomaly of fricatives in both KISukuma and KINyamweezi indicates that each language developed separately, with separate rules in operation. In fact, the SSN languages hardly share any of those important processes. Each behaves individually and differently as summarized in (133). While F21/F22b has regular lenition of PB *c and *b across the board, KINyamweezi shares only that aspect with F21/F22b. The rest of SSN are different, for

[76] Only in JinaKIIya is DL not skipped since PB *-pik- 'arrive' is /-ʃiga/

instance in DL and voiceless nasal formation, which are in F21/F22b but not in F22a, F22d, and F22e. SiSuumbwa has glottalization and BS with 7 > 5, while both F21 and F22 have none of these.

(133)

	Process	*F21/F22b*	*F22a/F22d/F22e*	*F23a,b,c*
1	Dahl's Law ($C_{1[-vl]}VC_{2[-vl]}V > C_{1[+vd]}VC_{2[-vl]}V$	Yes	Traces?	Traces?
2	Regular reflex e.g. lenition *b > β, *c > s, *p > h	*b > β, *c > s	*b > β, *c > s	*p > h, *b > β, *c > s,
3	Voiceless nasal formation $N \rightarrow \dot{N}/\_C_{[-vl]}$	Yes	No	No
4	BS and 7 > 5	No	No	Yes

Chronologically, BS in SiSuumbwa is not a process which is as old as glottalization, since, PB *pi does not produce a spirant. This only points to earlier glottalization which blocked BS in that environment. This suggests BS either diffused from elsewhere as well or it started in F23 only later. If it was acquired through borrowed words, then it affected the whole phonological system because it was adapted. This is illustrated in *Table 3.36* where only loanwords in SiSuumbwa seem to show BS, although with far-reaching consequences, leading to 7 > 5. If SiSuumbwa is assumed to have split from DJ, then the source might have been EJ20 or DJ60. Such sources suggest that when SiSuumbwa diverged, DJ60 and EJ20 were one language and had undergone glottalization first, followed by BS later.

Table 3.36 Status of Glottalization and BS in SiSuumbwa, KɪSukuma and KɪNyamweezi

Language ☛ Proto Bantu ↓	F23	F21a	F21b	F21c	F22b	F22a, F22d, F22e*
*-pod- 'cool'	-hola	-pola	-pola	-pola, -hola	-pola	-pola
*-pɪni 'handle, haft'	-hini	-pɪni	-pɪni	-pɪni	-pɪni	-pɪni
*-pembe 'horn, ivory'	-heembe	-peembe	-peembe	-peembe	-peembe	-peembe
*-pɪ- 'ripen'	-hya	-hya	-pya	-pya	-pya	-pya
*-pic- 'hide'	-bisa	-βisa	-βisa	-βisa	-βisa	-βisa
*-pʊte 'abscess'	-hute	-βute	-βute	-βute	-	-pute
*-paca 'twins'	-hasa	-βasa	-βasa	-βasa	-βasa	-pasa
*-piga 'hearthstone'	-higa	-higa	-siga	-ʃiga	-figa	-figa
*-tap- 'draw water'	-taha	-daha	-daha	-daha	-daha	-daha
*-pigo 'kidney'	-figo	-pɪgo (m̩)	-pɪgo (m̩)	-pɪgo (m̩)	-figo	-figo

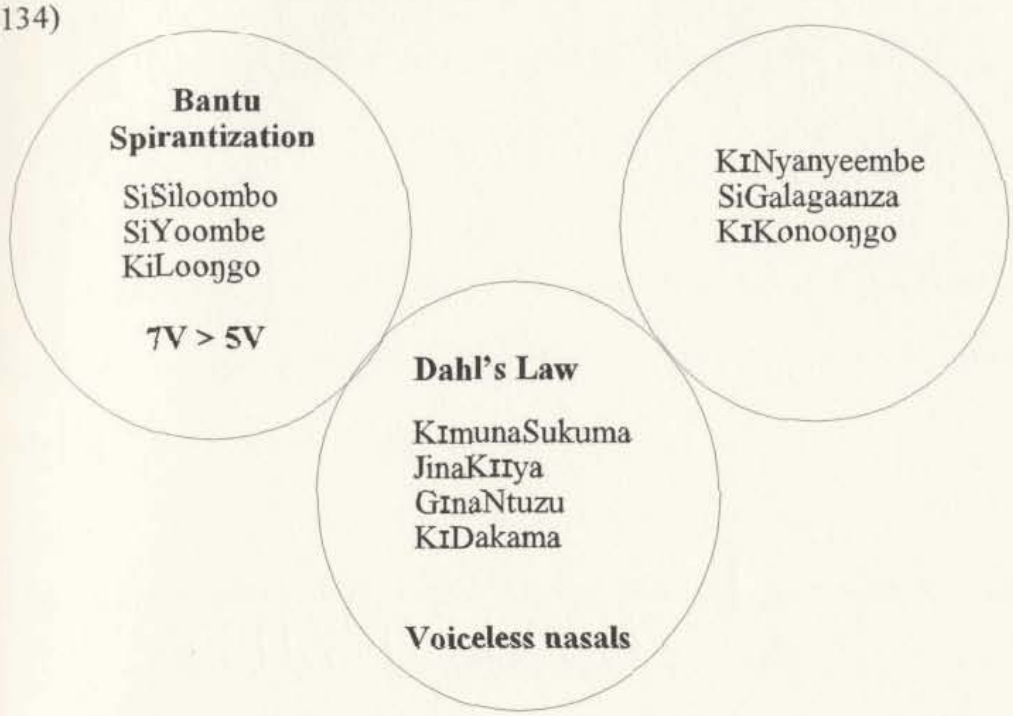
Since F23 can be viewed as part of EJ20/DJ60 historically, it was easy to borrow words, adopt them easily, and then adapt them as well after the split. For the words inherited directly from Proto Bantu like 'arrive' -hika PB < *-pik-, glottalization takes precedence because it had already occurred when BS set in with loan words like -koofi < *-kopi' 'flat of hand'; -fisi < *-piti 'hyena', -figo < *-pigo 'kidney'. These, though they are Proto Bantu, appear to have been borrowed from elsewhere, since the native words appear to be affected by glottalization, which blocks BS in PB *pi because the trigger *pi is removed by becoming /hi/ (See Batibo 2000 on this bleeding effect between BS and glottalization).

3.2.6. Conclusion: SSN phonological change and grouping

SiSuumbwa, KISukuma and KINyamwezi stand alone individually within a relationship which cannot be described satisfactorily as genetic. Their differences are linguistically significant, making their current similarity only areal at best. Reconstructing proto-forms from the three languages as if they belonged to the same immediate ancestor is also not feasible, since they diverge diachronically. Reconstruction and grouping should ideally start with the smallest levels in each sub-grouping, and proceed to the top nodes of genetic affiliation. Within the scope of this work, this is not possible due to the new discovery that SiSuumbwa on the one hand and KINyamwezi and KISukuma on the other, are not as close as originally thought, summarized by the phonological processes noted in (134).

Of the four tests used (BS, 7 > 5, DL, and voiceless nasals), all are absent in KINyamweezi (F22a, F22d, F22e) as native features. Any traces suggest borrowing. KISukuma is characterized by DL and voiceless nasals which are absent in the other two; SiSuumbwa has BS and 7 > 5, and the others have not.

(134)



3.3. CONCLUSIONS

From the discussions in this chapter, it appears that what most of the Zone F varieties share is geographical proximity rather than phonological innovation. In the whole of Zone F, BS and 7 > 5 is found in F10 and F23 only, while the situation in F25 is mixed, just as it is in F21 and F22. F34 is alone in being 5V without BS, although the number of vowels varies with researchers. The evidence in this study supports 5V without question. DL is confined to F21/F22b only, while in the rest, any traces are from loan words. And finally, voiceless nasals within Zone F are confined to the DL languages: F21/F22b. The rest of the languages show some individual innovations which do not help in unifying the zone.

Although SiSuumbwa is no longer a member of Zone F, the phonological evidence suggests that, one dialect, KiLooŋgo (F23c), originally belonged to EJ10/EJ20 and the rest of F23 derived probably from DJ60. Both SiSuumbwa (F23a/F23b) and KiLooŋgo (F23c) share BS and 7 > 5 with DJ and EJ languages.

KɪSukuma/KɪDakama (F21/F22b) and the rest of KɪNyamweezi (KɪNyanyeembe (F22a), SiGalagaanza (F22d) and KɪKonooŋgo (F22e) share little, apart from their phonological conservatism and geographical adjacency.

F10 and F25 are outside our focus, and without considering other languages outside this study, we cannot say anything about their evolution; only general comments were made.

F33 and F34 (KeeMbuwe and KiiRaŋgi) have some commonalities such as PB *g loss, and *l →r before front vowels.

F24 (KɪKɪɪmbʊ) and F31 (KɪnɪLaamba) share one of the most conservative phonological systems in Zone F and beyond, but there are no sets of shared innovation to support their common history. On the other hand, while F32 (KɪRɪmi) is equally conservative, some of the striking features are PB *t > R and *p > ɸ. They do not share much with F24 or F31, indicating that any similarity may be areal rather than genetic.

For classification therefore, the innovations like Bantu Spirantization with the 7V versus 5V sequel and Dahl's Law as major criteria for subgrouping only succeed in isolating the various Zone F languages into smaller independently evolved languages rather than one unit with a common intermediate node in a genetic tree. This phonological picture suggests that the classification of these languages into geographical zones was mainly iconic: assuming genetic relationship because of adjacency. This justifies this study as a contribution towards filling out the gaps identified in Chapter 2. The inclusion of as many dialects as possible has demonstrated that BS, 7 > 5, DL, glottalization and voiceless nasal formation are significant criteria which are able to isolate languages or dialects which followed a common historical path from those which did not, despite their current geographical adjacency or similarity due to that adjacency.

The bottom line from the phonological picture is that there is no linguistic Zone F if other diagnostic tests outside phonology are not considered. Vocabulary and morpho-syntactic evidence might shed a different light by reviving Zone F into a linguistic unit. On a more optimistic note, the phonological features surveyed do not tell us much about classification because they are shared by other groups as well. To find more evidence for Zone F, the analysis of lexical development is the subject of Chapter 4. Otherwise, by the phonology hypothesis alone within the zone, linguistic Zone F or SSN can no longer be maintained.

CHAPTER FOUR
LEXICAL DEVELOPMENT

4.0 INTRODUCTION

This chapter explores the development of vocabulary in Zone F. It is divided into three sections. The first part is a lexicostatistical survey as a quantitative analysis for relatedness, while the second establishes the genetic relationship between the varieties using qualitative evidence as diagnostic criteria. The last part summarizes the findings of lexical relatedness in Zone F.

Quantitative evidence refers to shared, and hence inherited vocabulary from a common proto language. Although we may assume various protos/nodes in the development of Zone F languages, at this point we are concerned with lexical items inherited from PB. When there are shared lexical items between two or more language varieties, the first assumption is that they are from the same ancestor language. Unless they are loans, chance similarities, universal symbolisms or a result of diffusion because of contiguous locations, shared lexis among sister languages is expected. In terms of weight, it is traditionally held that inherited words do not help much diagnostically since it is a given fact that all languages descending from the same ancestor have the same basic features of the parent, unless something drastic happened to change that. Diminished diagnostic utility of retention, however, may only be a matter of degree, since, as is shown below, retention can help much in grouping languages genetically. On the other hand, qualitative evidence as a stronger diagnostic measure of genetic

relationship refers to shared innovation which is a creative departure from the original by any or all of the following three major processes: borrowing; changing the phonological and/or semantic value of inherited words; and unique creations. In this study, purely phonological innovation is excluded because it refers essentially to inherited vocabulary which is only modified. In addition, it is not lexical innovation. The reliability of qualitative evidence, like that of retention, depends on careful analysis: without care, it is difficult to know if similarity between languages is due to genetic ancestry or contact (for a fuller treatment of genetic vs contact similarity, see Hinnebusch, 1976, 1999).

4.1 QUANTITATIVE EVIDENCE: SHARED VOCABULARY AND COMMON ANCESTRY

With the exception of a few languages like KeeMbuwe, KiBende, KiLooŋgo and ɪcɪWʊʊŋgʊ, in many of the Zone F members, shared vocabulary has been dealt with quite adequately using lexicostatistics by Nurse (1979), Nurse and Philippson (1982) and to a limited extent Kahindi (1988) who compared only SiSuumbwa, KɪSukuma, KɪNyamweezi and iGiHa. Although lexicostatistics as a method is controversial, it is used here as a contribution to the clarification of that controversy, as presented in the overview of the method in ***1.3.5.2*** above. Any good method, in linguistics or any field, tends to yield reliable and consistent results which are not significantly different from previous classificatory findings based on other, more popular methods. The following are the results of the application of lexicostatistics to Zone F. They are based on the comparison of a pair of

languages in a horizontal relationship, that is, how two language varieties compare synchronically.

4.1.1 Method used

The method is that explained by Swadesh (1950:157), Lees (1953:115), Fairbanks (1955), Swadesh (1955:122), McElhanon (1970:216) and Embleton (1986), among others. In this method, cognation is treated as an 'either/or' possibility. Words are either descended from one common source or not, rather than a series of phonologically graded departures from the proto-forms. This approach slightly departs from the graded treatment of retention used by Nurse and Philippson (1980). Although their method is complicated, it does not significantly alter the overall configuration of relationships between languages derived by simpler ones (Nurse and Philippson, ibid:27). The 'either/or' method therefore involved the following steps:

(i) 28 language varieties were selected. These included all Zone F varieties and some controls from Zone DJ, EJ, G and M, as follows: SiSuumbwa F23: (SiSiloombo (Si), SiYoombe (Yo), KiLooŋgo (Lo)); KɪSukuma F21: (KɪmunaSukuma(Su), GɪnaNtuzu (Nt) JinaKɪɪya (Ki)); KɪNyamweezi F22: (KɪDakama (Da), KɪNyanyeembe (Ny), KɪKonooŋgo (Ko), SiGalagaanza (Ga)); KiBende/KiToŋgwe F10: (Be); KɪnɪLaamba F31: (KɪnaUshoola (Us), KɪnɪLaamba Central (La), KɪnɪHaanzu (Ha)); KɪRɪmi F32: (GiAhi (Ah), GɪRwana (Rw), ɣɪnyaMunyiŋanyi (Mu)); KɪKɪɪmbʊ F24: (KɪKɪɪmbʊ North (Kn), KɪKɪɪmbʊ South (Ks)); ɪcɪWʊʊŋgʊ F25: (Wu); KiiRaŋgi F33: (Ra); KeeMbuwe F34: (Mb); oRuHaya

EJ22: (Zone EJ) (RuHyoza (Hy)); iGiHa DJ66: (Zone DJ) (Hh); CiGogo G11:(CiNyambwa (Go)); eKiHehe G62: (He); ɪKɪNyakyusa M31: (Ky); and KiSwahili G42d:(KiSanifu (Sw), from KiUnguja).

(ii) A 100-word list modified by Nurse (1979) from that by Swadesh (1950, 1955) was used, as shown in (135), in alphabetical order, with assumed Proto Bantu etyma. It has been generally found that the shortest 100-word list used to-date is reliable and useful to a large extent (Hymes 1960:12).

(135)

abdomen, stomach, belly *-da; all *-(n)ce, *-yona; arm, hand *-kono, *-boko; ashes *-bu; back (n)*-goŋgo; bad *-bɪ; bark *-koba; bird, *-nyoni, *-dege; bite *-dʊm-; blood *-gadi, *-(n)yiŋga; bone *-kupa; breast *-beede; child, infant *-yana; cloud *-dunde; cold *-pepo; come *-yij-; cook (vt)*-dug-, *-teek-; dark, black *-yidʊ; daytime *-cɪ, *-jʊba; die *-ki-, *-ku-; dog *-bʊa; drink (vt)*-nu-; ear *-tʊi, *-kʊtʊ; eat *-dɪ-; egg *-gɪ; eye *-yico; feather *-yoya; fingernail *-jada; fire *-yoto, *-dɪdo; fish *-comba, *-cuɪ; *-cɪ fly (vi) *-pap-, *-gʊdʊk-; give *-pa, *-yiŋk; go *-gi-, *-yend-; good *-yija; great, big, large, powerful *-kʊdʊ; hair *-yuɪdɪ, *-yuede; he, she *-kʊe, *-ye(e); head *-tʊe; hear *-yigu-, *-teg- *-pʊd-; heart *-kodo, *-tɪma, *-yoyo; horn, ivory *-pembe; I *-ne; kill *-yit-, *-bʊd(ag)-; knee *-du(i); know *-man(i)-; leaf *-yani; leg, foot *-gʊdʊ; liver *-tɪma; long/tall *-deepu, *-tadɪ, *-de; louse *-da; male, man, husband *-koci; *-dume; many *-yiŋgɪ; meat *-(n)yama; milk *-beede; moon *-yedi; mountain *-gʊdʊ, *-dʊndʊ; mouth *-domo, *-nua; name *-yina; neck *-ki(i)ŋgo, *-koti; new *-pɪa; night *-tikʊ; nose *-pʊda, *-jʊdʊ, *-yɪdo; oil, fat *-kuta; old *-kʊdʊ; one *-mo; path, way *-jɪda; person *-ntʊ; rain (n) *-buda; root *-di; sand *-caŋga; say *-bʊɪd-; see *-bon-; seed *-beyʊ, *-bʊto; short *-kupɪ; sing *-yɪmb-; sit *-yikad-; skin *-koba, *-kanda, *-dɪdɪ?; sleep (vi)*-daad-, *-gon-; small *-niini, *-ke; smoke *-yoki; soil *-doŋgo; stand *-yɪm(ɪdɪd)-; star *-tondua, *-yo(n)ti; stone *-bʊe; sun *-jʊba; tail *-kɪda; that *-da/e, *-dɪa, VCVo ; they *-bo; tongue *-dɪmi; tooth *-yino; tree *-tɪ, *-pɪkɪ; two *-bɪdɪ; water *-jɪ; we *-cue, *-yitue; what *-kɪ; white *-yedʊ; who *-nani; woman, female *-ke, *-kadi; you (sg) (thou) *-be; you (pl) (ye) *-mʊe, *-nue

(iii) Where there were two or more words in the English gloss, they were retained if they all referred to a polysemous word in Proto Bantu or its daughter languages. Gudschinsky (1956:179) suggests using only one word as an equivalent where two words compete equally, by choosing one randomly, preferably by tossing a coin. This advice was not followed in both the English gloss and Proto Bantu forms in some of the words.

(iv) The selection of Proto Bantu forms was not always straightforward. Two, sometimes three, and even more reconstructions were available for one word in Proto Bantu, as in 'all' *-(n)ce, *-yona; 'arm, hand' *-kono, *-boko; blood *-gadi, (n)yiŋga; 'cook (vt)' *-dug-, *-teek-; 'die' *-ki-, *-ku-; 'fire' *-yoto, *-dɪdo; and 'seed' *-beyʊ, *-bʊto.

To accommodate such a situation, the following approach was adopted: the comparisons were done using all protoforms, each language according to the words it had in its lexical inventory. It was this list which was adopted as representative of simultaneous lexicostatistical (cognation) computation and similarity subgrouping. It will be noted here that, while the method adhered to strict cognation, it also simultaneously measured similarity, just as Fairbanks (1955:120) notes that a consistent relationship between cognation and similarity counts is normally displayed. Using this method yields consistently higher figures of inherited words across the board, compared to relatively lower figures if a strictly monogenetic approach was adopted. For instance, if the lexemes {-kolo} and {-tɪma} were both listed in English as 'heart', in Proto Bantu they are two words. Languages sharing

either word had a cognate score, while those not sharing it got a zero.

4.1.2 Lexicostatistics of language pairs

This is the standard procedure, and each of the 28 language varieties was compared to the rest to determine shared vocabulary between each pair. The following procedure was adopted:

(i) Each language variety was compared lexeme by lexeme with each of the other 27 varieties in turn to measure cognation against Proto Bantu, as sample (136) shows. Only the 'zeroes' were entered, and any blank space indicated cognation. Any other system representing cognation/non-cognation would have been adopted, since this was chosen for convenience only. In (136), S/N is the serial number of each word in the list compiled by Nurse and Philippson. The two-letter codes are iconic representations of the language varieties used for convenience. The first two letters of each language variety are from the root of each name in the Roman alphabet, which excludes any phonetic symbol that would take more space. These symbols are also indicated in the list of abbreviations.

(136).

Language variety ☛ *PB and Gloss* ⇓	*S N*	*Si Yo*	*Si Lo*	*Si Su*	*Si Nt*	*Si Ki*	*Si Da*	*Si Ny*
abdomen, stomach *-da	133							
all *-(n)ce,* -yona	926		0	0	0	0	0	0
arm, hand *-kono, *-boko	55		0	0	0	0	0	

Languages from other zones were included as a control to determine if the method can really differentiate between languages assumed to belong to other zones. They were selected because some are also adjacent to one or more of the Zone F languages, although ɪKɪNyakyusa M31: (Ky) is not adjacent to any Zone F language, only nearer to ɪcɪWʊʊŋgʊ F25: (Wu).

(ii) The scale was binary, 1 for cognation, and 0 for non-cognation. Cognation was defined as any regularity of morpheme realization in any lexeme believed to be derived from a common proto language and which is manifested in descendant languages and their dialects as regular, but not necessarily, by identical shapes, as illustrated in (137) (The full list is shown in Appendix 11). In this case, a word was either cognate or it was not. Thus, mà-βú, mà-wú, and mà-vú are cognate to Proto Bantu *-bu, 'ash', awarded 1, while mà-túúndè and mà-fúúndú both 'ash' are not, and therefore are coded 0.

(137)

SN	Gloss	Da	Ny	Ko	Ga	Be
337	ashes	iβú/màβú	màtùùndè	màwú	ivú/màvù	ifúúndú/màfúúndú

(iii) Doubtful cases were ignored and awarded a 0, while probable ones were given a full 1, so that any bias in awarding 1 or 0 cancelled each other between the two scenarios. For instance, in SiSiloombo and SiYoombe, {ilunde} 'cloud' was not recognized as cognate to Proto Bantu *-dunde 'cloud', although it was so recognized in KImunaSukuma as {ilunde} because, SiSiloombo and SiYoombe do not allow *d /_u > l due to Bantu Spirantization obtaining in them. So,{ilunde} was judged as a loan, probably from KImunaSukuma, since the form from an inherited lexeme would have been {ivunde}. Likewise, KIKIImbʊ North {liihu} 'long' was judged to be a loan, probably from KIKonoonjgo or KINyanyeembe {liihu}, from Proto Bantu *-deepu 'long', since the regular correspondence of *p in KIKIImbʊ is /p/ without exception.

On the other hand, KeeMbuwe {mbuuye} 'stone' or KiiRanjgi, KinyaRwanda, KiHangaaza, and KiVinza {iβuye} were treated as cognates of Proto Bantu *-bʊe 'stone' where the inserted /y/ was regarded as an articulatory strategy only, similar to other reproductions like {mabwe} in KIKIImbʊ and iKiFuliiru, {mawe} in KiSwahili or KISukuma.

Another consideration involved words which in Proto Bantu were given many forms, as reconstructed by Guthrie (1967-1971). These different but cognate forms were not sifted and

solidified by Guthrie to obtain only one or two reconstructions. One extreme case is that for 'all'. It has thirteen morphemes, although on closer examination, they can be reduced to only two, *-ce and *-ona. The rest are reflexes in the different languages. These morphemes for 'all' are *-ce, *-co, *-yence, *-yoce, *-yonce, *-yonco, *-yonca, *-yocɪ, *-yoci,*-yote, *-yoti, *- yonti, and *-yona. Likewise, {iwe}(KiSwahili, {iβuye} (iGiHa), {ibwe} (ɪKɪNyakyusa), {livue} (KiWanji), {libuhi} (KiPogolo) and {igwe}(KɪnɪLaamba) 'stone' are all cognate forms of *-bʊe 'stone'.

(iv) After the 100-word list for each pair was compared, the 0s were counted, representing the percentage of non-cognation, which was proto form loss through replacement by borrowing or other forms of innovation. The remaining count was shared cognation. Since it was a 100-word list, the figures so obtained were the final percentages, needing no conversion. Conversely therefore, the 0s could also be represented as the only marked forms, and their count out of the 100 total would constitute the rate or extent of innovation or loss in each language variety.

4.1.2.1 Lexicostatistical subgrouping: procedure and results

The results shown in *Tables 4.1* to *4.12* represent the relationship between the Zone F language varieties to each other. In addition, the languages external to Zone F are also compared. On the other hand, *Tables 4.13 to 4.15* illustrate the difficulty of inclusion and exclusion in grouping, based on statistics. Some languages like CiGogo which are outside

Zone F show more affinity than languages supposed to be members of Zone F. Based on the percentages, the following master table was made, as shown in *Table 4. 1.*

Table 4.1. Lexicostatistical relationships between Zone F and some adjacent languages

Bc
52 Lo
64 57 Su
62 57 87 Nt
66 59 90 90 Ki
64 58 86 84 87 Da
70 57 78 76 80 81 Ny
72 60 79 77 81 81 84 Ga
68 58 81 80 84 84 84 84 Ko
63 56 77 78 80 78 79 79 84 Kn
62 55 76 75 77 76 74 75 78 82 Ks
67 64 68 70 71 70 72 78 73 67 68 Si
67 66 70 72 73 72 74 82 75 71 68 84 Yo
55 50 75 75 76 75 69 70 74 75 74 66 65 Us
56 51 74 74 76 74 69 70 75 75 73 67 66 83 La
56 52 78 79 82 77 73 73 77 76 72 69 69 79 77 Ha
58 58 75 71 76 75 71 72 74 74 71 68 68 71 70 74 Ah
57 56 76 73 76 76 70 71 74 74 72 66 71 73 71 76 80 Rw
55 53 71 69 72 72 66 68 69 70 67 63 64 69 68 71 79 77 Mu
56 53 70 66 71 71 70 67 73 72 70 60 61 66 67 66 71 69 69 Mb
51 42 65 61 64 65 61 61 66 67 64 53 55 59 58 60 62 62 61 64 Ra
61 53 64 64 64 66 69 69 70 71 70 53 64 62 64 64 64 62 60 63 56 Wu
50 57 55 55 57 56 53 60 56 52 52 57 58 50 51 52 53 54 51 49 42 48 Hy
59 54 58 59 61 56 61 65 61 57 56 64 64 54 52 54 59 65 55 54 57 58 52 Hh
54 47 59 58 61 63 64 66 64 64 64 57 66 57 59 60 61 59 60 63 60 63 49 54 Go
43 40 44 43 46 47 51 52 48 49 52 46 46 43 45 45 48 45 45 47 43 49 42 41 57 He
52 46 55 54 57 55 57 58 68 58 59 52 53 53 54 54 55 54 52 56 45 57 48 56 60 49 Ky
53 49 62 61 65 65 63 67 69 65 61 55 57 60 62 62 65 66 64 65 61 61 49 53 61 48 55 Sw

For convenience, the shared percentages on the right-most edge on the diagonal line were arranged so that the pairs with the lowest percentages were placed at the end of the Zone F spectrum, either to the top or bottom of the diagonal. Assumed linguistic relatedness and known geographical proximity were also considered where it was feasible. Then, the highest figure on that diagonal was identified and the pair merged as one unit.

Table 4.2. Collapsing highest percentage of Table 4.1 (90%)

```
Be
52 Lo
64 57 Su
64 58 89 Nk                                                    Nk  = 90
64 58 86 86 Da
70 57 78 78 81 Ny
72 60 79 79 81 84 Ga
68 58 81 82 84 84 84 Ko
63 56 77 79 78 79 79 84 Kn
62 55 76 76 76 74 75 78 82 Ks
67 64 68 71 70 72 78 73 67 68 Si
67 66 70 73 72 74 82 75 71 68 84 Yo
55 50 75 76 75 69 70 74 75 74 66 65 Us
56 51 74 75 74 69 70 75 75 73 67 66 83 La
56 52 78 81 77 73 73 77 76 72 69 69 79 77 Ha
58 58 75 74 75 71 72 74 74 71 68 68 71 70 74 Ah
57 56 76 75 76 70 71 74 74 72 66 71 73 71 76 80 Rw
55 53 71 71 72 66 68 69 70 67 63 64 69 68 71 79 77 Mu
56 53 70 69 71 70 67 73 72 70 60 61 66 67 66 71 69 69 Mb
51 42 65 63 65 61 61 66 67 64 53 55 59 58 60 62 62 61 64 Ra
61 53 64 64 66 69 69 70 71 70 53 64 62 64 64 64 62 60 63 56 Wu
50 57 55 56 56 53 60 56 52 52 57 58 50 51 52 53 54 51 49 42 48 Hy
59 54 58 60 56 61 65 61 57 56 64 64 54 52 54 59 65 55 54 57 58 52 Hh
54 47 59 60 63 64 66 64 64 64 57 66 57 59 60 61 59 60 63 60 63 49 54 Go
43 40 44 45 47 51 52 48 49 52 46 46 43 45 45 48 45 45 47 43 49 42 41 57 He
52 46 55 56 55 57 58 68 58 59 52 53 53 54 54 55 54 52 56 45 57 48 56 60 49 Ky
53 49 62 63 65 63 67 69 65 61 55 57 60 62 62 65 66 64 65 61 61 49 53 61 48 55 Sw
```

To determine the affinity between the varieties, the highest figure for each preceding table was collapsed, and the resulting new configuration became the subsequent table. In *Table 4.2*, the highest figure of Table 4.1 was taken as 90% (Nt/Ki) = GInaNtuzu + JinaKIIya. The two language varieties were combined to be one entity, Nk, with the shared retention rate of 90%. Since Nk became one language, all the other languages associated with it as a single entity were adjusted accordingly.

To treat Nk as a single language, their two rows and columns associated with the other languages were collapsed into one row and column respectively. For instance, with KImunaSukuma, the shared vocabulary percentage in *Table 4.1* is 87% with GInaNtuzu and 90% with JinaKIIya. To obtain a single shared figure, the two were added, and then divided by two: (a) 87 + 90 = 177, (b) 177÷2 = 88.5, or approximately 89%. This became the shared percentage between Nk and Su (KImunaSukuma), appearing in *Table 4.2*.

Likewise, the shared figures of KiLooŋgo (Lo) with GInaNtuzu and JinaKIIya (Nk) in *Table 4.1* are 57% and 58% respectively. These are collapsed by adding, and then dividing them by two, to obtain 58%. This figure appears in *Table 4.2* as a percentage between Nk and Lo. The figures collapsed in these rows are combined vertically, taking the top row figure (57%), then adding it to the bottom row figure (58%). The procedure is repeated to the end of the rows until all language figures are collapsed to the utmost limit so that the languages cannot be combined any more.

On the other hand, the columns of figures which associate the combined language pairs are added horizontally, taking one language on the left and then combining it with its paired counterpart on its right. For instance, in *Table 4.1*, GInaNtuzu and JinaKIIya share with KIDakama 84% and 89% respectively. These two figures are horizontally placed, and by combining them, then adding and dividing by two, the result is 86%, a percentage shown in

Table 4.2. To aid reference of originally shared percentages, the numbers at the right margin of the tables refer to those original shared figures for that combination.

Table 4.3. Collapsing highest percentage of Table 4.2 (89%)

Be
52 Lo
64 58 Sk — Sk = 89 Nk = 90
64 58 86 Da
70 57 78 81 Ny
72 60 79 81 84 Ga
68 58 82 84 84 84 Ko
63 56 78 78 79 79 84 Kn
62 55 76 76 74 75 78 82 Ks
67 64 70 70 72 78 73 67 68 Si
67 66 72 72 74 82 75 71 68 84 Yo
55 50 76 75 69 70 74 75 74 66 65 Us
56 51 75 74 69 70 75 75 73 67 66 83 La
56 52 80 77 73 73 77 76 72 69 69 79 77 Ha
58 58 75 75 71 72 74 74 71 68 68 71 70 74 Ah
57 56 76 76 70 71 74 74 72 66 71 73 71 76 80 Rw
55 53 71 72 66 68 69 70 67 63 64 69 68 71 79 77 Mu
56 53 70 71 70 67 73 72 70 60 61 66 67 66 71 69 69 Mb
51 42 64 65 61 61 66 67 64 53 55 59 58 60 62 62 61 64 Ra
61 53 64 66 69 69 70 71 70 53 64 62 64 64 64 62 60 63 56 Wu
50 57 56 56 53 60 56 52 52 57 58 50 51 52 53 54 51 49 42 48 Hy
59 54 59 56 61 65 61 57 56 64 64 54 52 54 59 65 55 54 57 58 52 Hh
54 47 60 63 64 66 64 64 64 57 66 57 59 60 61 59 60 63 60 63 49 54 Go
43 40 45 47 51 52 48 49 52 46 46 43 45 45 48 45 45 47 43 49 42 41 57 He
52 46 56 55 57 58 68 58 59 52 53 53 54 54 55 54 52 56 45 57 48 56 60 49 Ky
53 49 63 65 63 67 69 65 61 55 57 60 62 62 65 66 64 65 61 61 49 53 61 48 55 Sw

89% = Sk ((Nt/Ki) (GInaNtuzu + JinaKIIya) + Su (KImunaSukuma)

Percentage at right margin of table = Original shared % for combination

Table 4.4. Collapsing highest percentage of Table 4.3 (86%)

Be
52 Lo
64 58 Sd — Sd = 86 Sk = 89 Nk = 90
70 57 80 Ny
72 60 80 84 Ga
68 58 83 84 84 Ko
63 56 78 79 79 84 Kn
62 55 76 74 75 78 82 Ks
67 64 70 72 78 73 67 68 Si
67 66 72 74 82 75 71 68 84 Yo
55 50 76 69 70 74 75 74 66 65 Us
56 51 75 69 70 75 75 73 67 66 83 La
56 52 79 73 73 77 76 72 69 69 79 77 Ha
58 58 75 71 72 74 74 71 68 68 71 70 74 Ah
57 56 76 70 71 74 74 72 66 71 73 71 76 80 Rw
55 53 72 66 68 69 70 67 63 64 69 68 71 79 77 Mu
56 53 71 70 67 73 72 70 60 61 66 67 66 71 69 69 Mb
51 42 65 61 61 66 67 64 53 55 59 58 60 62 62 61 64 Ra
61 53 65 69 69 70 71 70 53 64 62 64 64 64 62 60 63 56 Wu
50 57 56 53 60 56 52 52 57 58 50 51 52 53 54 51 49 42 48 Hy
59 54 58 61 65 61 57 56 64 64 54 52 54 59 65 55 54 57 58 52 Hh
54 47 62 64 66 64 64 64 57 66 57 59 60 61 59 60 63 60 63 49 54 Go
43 40 46 51 52 48 49 52 46 46 43 45 45 48 45 45 47 43 49 42 41 57 He
52 46 56 57 58 68 58 59 52 53 53 54 54 55 54 52 56 45 57 48 56 60 49 Ky
53 49 64 63 67 69 65 61 55 57 60 62 62 65 66 64 65 61 61 49 53 61 48 55 Sw

86% = Sd = (Nt/Ki (GɪnaNtuzu + JinaKɪɪya) + Su (KɪmunaSukuma) + Da (KɪDakama)

Sd = Original KɪSukuma group (Su,Nt,Ki) + KɪDakama (Da)

Percentage at right margin of table = Original shared % for combination

In *Table 4.4*, two sets of languages share 84% (a) KɪNyanyeembe (Ny), SiGalagaanza (Ga) and KɪKonooŋgo (Ko), and (b) SiSiloombo (Si) and SiYoombe (Yo). They are both iconically labelled Nz, for core KɪNyamweezi and Sy for core SiSuumbwa. Although it appears that KɪKɪmbʊ North (Kn) would ideally be collapsed with the Nz group

Table 4.5. Collapsing highest percentage of Table 4.4 (84%)

```
Be
52 Lo
64 58 Sd                          Sd  = 86    Sk  = 89      Nk  = 90
70 58 81 Nz                       Nz  = 84
63 56 78 81 Kn
62 55 76 76 82 Ks
67 65 71 76 69 68 Sy              Sy  = 84
55 50 76 71 75 74 66 Us
56 51 75 71 75 73 67 83 La
56 52 79 74 76 72 69 79 77 Ha
58 58 75 72 74 71 68 71 70 74 Ah
57 56 76 72 74 72 69 73 71 76 80 Rw
55 53 72 67 70 67 64 69 68 71 79 77 Mu
56 53 71 70 72 70 61 66 67 66 71 69 69 Mb
51 42 65 63 67 64 54 59 58 60 62 62 61 64 Ra
61 53 65 69 71 70 59 62 64 64 64 62 60 63 56 Wu
50 57 56 56 52 52 58 50 51 52 53 54 51 49 42 48 Hy
59 54 58 62 57 56 64 54 52 54 59 65 55 54 57 58 52 Hh
54 47 62 65 64 64 62 57 59 60 61 59 60 63 60 63 49 54 Go
43 40 46 50 49 52 46 43 45 45 48 45 45 47 43 49 42 41 57 He
52 46 56 61 58 59 53 53 54 54 55 54 52 56 45 57 48 56 60 49 Ky
53 49 64 66 65 61 56 60 62 62 65 66 64 65 61 61 49 53 61 48 55 Sw
```

84% = Nz (KINyanyeembe (Ny), SiGalagaanza (Ga), KIKonoonjgo (Ko); Sy = 84% (SiSiloombo (Si), SiYoombe (Yo)).

Percentage at right margin of table = Original shared % for combination

because it shares an 84% rate with KIKonoonjgo (Ko), its shared rate with the other two, KINyanyeembe (Ny) and SiGalagaanza (Ga) are consistently lower at 79%, suggesting that KIKIImbU North (Kn) does not have such an immediate genetic relationship with Nz as a group. Most probably, the bond is with individual varieties facilitated by proximity and borrowing.

Table 4.6. Collapsing highest percentage of Table 4.5 (83%)

```
Be
52 Lo
64 58 Sd                    Sd  = 86    Sk  = 89      Nk  = 90
70 58 81 Nz                 Nz  = 84
63 56 78 81 Kn
62 55 76 76 82 Ks
67 65 71 76 69 68 Sy        Sy  = 84
56 51 76 71 75 74 67 Ul     Ul  = 83
56 52 79 74 76 72 69 78 Ha
58 58 75 72 74 71 68 71 74 Ah
57 56 76 72 74 72 69 72 76 80 Rw
55 53 72 67 70 67 64 69 71 79  77 Mu
56 53 71 70 72 70 61 67 66 71  69 69 Mb
51 42 65 63 67 64 54 59 60 62  62 61  64 Ra
61 53 65 69 71 70 59 63 64 64  62 60  63 56 Wu
50 57 56 56 52 52 58 51 52 53  54 51  49 42  48 Hy
59 54 58 62 57 56 64 53 54 59  65 55  54 57  58 52 Hh
54 47 62 65 64 64 62 58 60 61  59 60  63 60  63 49 54 Go
43 40 46 50 49 52 46 44 45 48  45 45  47 43  49 42 41 57 He
52 46 56 61 58 59 53 54 54 55  54 52  56 45  57 48 56 60 49 Ky
53 49 64 66 65 61 56 61 62 65  66 64  65 61  61 49 53 61 48 55 Sw
```

89% = Sk ((Nt/Ki) (GInaNtuzu + JinaKIIya) + Su (KImunaSukuma)
86% = Sd = (Nt/Ki (GInaNtuzu + JinaKIIya) + Su (KImunaSukuma) + Da (KIDakama)
84% = Nz (KINyanyeembe (Ny), SiGalagaanza (Ga), KIKonooŋgo (Ko)
84% = Sy (SiSiloombo (Si), SiYoombe (Yo)).
83% = Ul (KInaUshoola (Us) + KInILaamba Central (La)

Percentage at right margin of table = Original shared % for combination

Table 4.7. Collapsing highest percentage of Table 4.6 (82%)

| | | |

Table 4.9. Collapsing highest percentage of Table 4.8 (80%)

| | | |

Table 4.10 Collapsing highest percentage of Table 4.9 (78% -SN · Km)

```
Be                                          Sk  = 89        Nk  = 90
52 Lo                                       Sy  = 84        Ul  = 83
65 57 NM                                    SN  = 81        Sd  = 86
67 65  72 Sy                                                Nz  = 84
56 51  75 67 Ul                                             Km  = 82
56 52  76 69 78 Ha
58 57  74 69 72 75 Ar                                       Ar  = 80
55 53  70 64 69 71 78 Mu                                    NM  = 78
56 53  71 61 67 66 70  69 Mb
51 42  65 54 59 60 62  61  64 Ra
61 53  69 59 63 64 63  60  63  56 Wu
50 57  54 58 51 52 54  51  49  42  48 Hy
59 54  59 64 53 54 62  55  54  57  58  52 Hh
54 47  64 62 58 60 60  60  63  60  63  49  54 Go
43 40  50 46 44 45 47  45  47  43  49  42  41  57 He
52 46  58 53 54 54 55  52  56  45  57  48  56  60  49 Ky
53 49  64 56 61 62 66  64  65  61  61  49  53  61  48  55 Sw
```

78% = NM (SN + Km); Lm (Ul + Ha); RI (Ar + Mu)

Percentage at right margin of table = Original shared % for combination

Nk = GInaNtuzu + JinaKIIya
Sk = Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma
Sd = Sk (Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma) + KIDakama
Nz = KINyanyeembe + KIKonooŋgo + SiGalagaanza
Sy = SiSiloombo + SiYoombe
Ul = KInaUshoola + KInILaamba
Km = KIkIImbU North + KIKIImbU South
SN = Sd + Nz
Ar = GiAhi + GIRwana
NM = SN + Km

Table 4.11 Collapsing highest percentage of Table 4.10 (78%-Ul - Ha)

Be												Sk = 89		Nk = 90
52	Lo											Sy = 84		Ul = 83
65	57	NM										SN = 81		Sd = 86
67	65	72	Sy											Nz = 84
56	52	76	68	Lm										Km = 82
58	57	74	69	74	Ar									Ar = 80
55	53	70	64	70	78	Mu								
56	53	71	61	67	70	69	Mb							NM = 78
51	42	65	54	60	62	61	64	Ra						Lm = 78
61	53	69	59	64	63	60	63	56	Wu					
50	57	54	58	52	54	51	49	42	48	Hy				
59	54	59	64	54	62	55	54	57	58	52	Hh			
54	47	64	62	59	60	60	63	60	63	49	54	Go		
43	40	50	46	45	47	45	47	43	49	42	41	57	He	
52	46	58	53	54	55	52	56	45	57	48	56	60	49	Ky
53	49	64	56	62	66	64	65	61	61	49	53	61	48	55 Sw

Percentage at right margin of table = Original shared % for combination

Nk = GInaNtuzu + JinaKIIya
Sk = Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma
Sd = Sk (Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma) + KIDakama
Nz = KINyanyeembe + KIKonooŋgo + SiGalagaanza
Sy = SiSiloombo + SiYoombe
Ul = KInaUshoola + KInILaamba Central
Km = KIkIImbU North + KIKIImbU South
SN = Sd + Nz
Ar = GiAhi + GIRwana
NM = SN + Km
Lm = Ul + KInIHaanzu

Table 4.12 Collapsing highest percentage of Table 4.11 (78%-Ar - Mu)

Be											Sk = 89	Nk = 90	
52	Lo										Sy = 84	Ul = 83	
65	57	NM									SN = 81	Sd = 86	
67	65	72	Sy									Nz = 84	
56	52	76	68	Lm								Km = 82	
57	55	72	67	72	RI							Ar = 80	
56	53	71	61	67	70	Mb						NM = 78	
51	42	65	54	60	62	64	Ra					Lm = 78	
61	53	69	59	64	62	63	56	Wu				RI = 78	
50	57	54	58	52	53	49	42	48	Hy				
59	54	59	64	54	59	54	57	58	52	Hh			
54	47	64	62	59	60	63	60	63	49	54	Go		
43	40	50	46	45	46	47	43	49	42	41	57	He	
52	46	58	53	54	54	56	45	57	48	56	60	49	Ky
53	49	64	56	62	65	65	61	61	49	53	61	48	55 Sw

Percentage at right margin of table = Original shared % for combination

Nk = GInaNtuzu + JinaKIIya
Sk = Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma
Sd = Sk (Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma) + KIDakama
Nz = KINyanyeembe + KIKonooŋgo + SiGalagaanza
Sy = SiSiloombo + SiYoombe
Ul = KInaUshoola + KInILaamba Central
Km = KIkIImbU North + KIKIImbU South
SN = Sd + Nz
Ar = GiAhi + GIRwana
NM = SN + Km
Lm = Ul + KInIHaanzu
RI = Ar + ɣInyaMunyiŋanyi

Table 4.12 indicates that 76% is the highest percentage. However, it is not at the edge. In order to facilitate collapsing the pair which shares it, it is essential to shift it to the diagonal, doing all the necessary adjustments in the rows and columns of relationships. The rearranged configuration is indicated in *Table 4.13* by shifting Sy to the top of NM.

Table 4.13 Collapsing highest percentage of Table 4.12 (76%): Rearranging MN Lm

```
Be                                  Sk  = 89        Nk  = 90
52 Lo                               Sy  = 84        Ul  = 83
67 65 Sy                            SN  = 81        Sd  = 86
65 57 72 NM                                         Nz  = 84
56 52 68  76 Lm                                     Km  = 82
57 55 67  72  72 RI                                 Ar  = 80
56 53 61  71  67 70 Mb                              NM  = 78
51 42 54  65  60 62  64 Ra                          Lm  = 78
61 53 59  69  64 62  63  56 Wu                      RI  = 78
50 57 58  54  52 53  49  42  48 Hy
59 54 64  59  54 59  54  57  58 52 Hh
54 47 62  64  59 60  63  60  63 49 54 Go
43 40 46  50  45 46  47  43  49 42 41 57  He
52 46 53  58  54 54  56  45  57 48 56 60  49 Ky
53 49 56  64  62 65  65  61  61 49 53 61  48 55 Sw
```

Percentage at right margin of table = Original shared % for combination

Table 4.14 Collapsing highest percentage of Table 4.13 (76%)

```
Be                                  Sk  = 89        Nk  = 90
52 Lo                               Sy  = 84        Ul  = 83
67 65 Sy                            SN  = 81        Sd  = 86
61 55 70 NL                         Km  = 82        Nz  = 84
57 55 67  72 RI                                     Ar  = 80
56 53 61  69 70 Mb                                  NM  = 78
51 42 54  63 62  64 Ra                              Lm  = 78
61 53 59  67 62  63  56 Wu                          RI  = 78
50 57 58  53 53  49  42  48 Hy
59 54 64  57 59  54  57  58 52 Hh
54 47 62  62 60  63  60  63 49 54 Go
43 40 46  48 46  47  43  49 42 41 57  He
52 46 53  56 54  56  45  57 48 56 60  49 Ky
53 49 56  63 65  65  61  61 49 53 61  48 55 Sw
```

Percentage at right margin of table = Original shared % for combination]

Nk = GInaNtuzu + JinaKIIya
Sk = Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma
Sd = Sk (Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma) + KIDakama

Nz = KINyanyeembe + KIKonooŋgo + SiGalagaanza
Sy = SiSiloombo + SiYoombe
Ul = KInaUshoola + KInILaamba Central
Km = KIkIImbU North + KIKIImbU South
SN = Sd + Nz
Ar = GiAhi + GIRwana
NM = SN + Km
Lm = Ul + KInIHaanzu
RI = Ar + ɣInyaMunyiŋanyi
NL = NM + Lm

Table 4.15 Collapsing highest percentage of Table 4.14 (72%)

Be									Sk	= 89	Nk	= 90
52 Lo									Sy	= 84	Ul	= 83
67 65 Sy									SN	= 81	Sd	= 86
59 55 69 NR									Km	= 82	Nz	= 84
56 53 61 70 Mb									Ar	= 80	NM	= 78
51 42 54 63 64 Ra											Lm	= 78
61 53 59 65 63 56 Wu											RI	= 78
50	57	58	53	49	42	48	Hy					
59	54	64	58	54	57	58	52	Hh				
54	47	62	61	63	60	63	49	54	Go			
43	40	46	47	47	43	49	42	41	57	He		
52	46	53	55	56	45	57	48	56	60	49	Ky	
53	49	56	64	65	61	61	49	53	61	48	55	Sw

Nk = 90	Ul = 83	Lm = 78
Sk = 89	Km = 82	RI = 78
Sd = 86	SN = 81	NL = 76
Nz = 84	Ar = 80	NR = 72
Sy = 84	NM = 78	

Percentage at right margin of table = Original shared % for combination

Nk = GInaNtuzu + JinaKIIya
Sk = Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma
Sd = Sk (Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma) + KIDakama
Nz = KINyanyeembe + KIKonooŋgo + SiGalagaanza
Sy = SiSiloombo + SiYoombe

Ul = KInaUshoola + KInILaamba Central
Km = KIkIImbU North + KIKIImbU South
SN = Sd + Nz
Ar = GiAhi + GIRwana
NM = SN + Km
Lm = Ul + KInIHaanzu
RI = Ar + ɣInyaMunyiŋanyi
NL = NM + Lm
NR = NL + RI

For practical purposes, *Table 4.15* can be the final stage in combining the languages, although this raises the question of cut-off points in sub-grouping. When dealing with the classification of related languages using lexicostatistics, where should sub-grouping stop in collapsing percentages and combining them into nodes of related languages/dialects? According to glottochronology, the method from which all the assumptions in lexicostatistics are based, the interval from NR to KeeMbuwe is 1182 years[1] (or the split occurred in 817 AD), given the 70% shared vocabulary, recorded in 1999. With SiSuumbwa, the shared vocabulary with NR is 69% or 1230 years ago, in 769 AD. This span is suspect because it does not change much even when compared to lower levels like dialects. With KISukuma, SiSuumbwa shares 71% or they split 1135 years ago in 864 AD; with KINyamweezi, excluding KIDakama they share 76% or the split occurred 910 years ago in 1089 AD. Since most of the languages forming NR share vocabularies in the 80%s, then SiSuumbwa in the 70%s is unlikely to be joined to them, and hence the cut-off point is justified.

---

[1] A table of all percentages and the years they represent is presented and discussed in *4.1.2.3, Tables 4.16-18* when absolute chronology is compared to relative chronology discussed in Chapter 3.

But the difficulty of determining a limit remains real when the lower percentages after 72% are separated by short intervals only, such as 70%, followed by 69%, etc. Since the rates of shared retention are relative distances, the higher than 70% rate within the NR node is suggestive of a minimum, which can be observed even in *Table 4.1*. Addressing this question of a cut-off limit, Hymes (1960:26-7) points out that it is a difficult matter to decide, partly because of inadequate studies on procedure, but also partly because of the many factors involved in differentiating related languages. When speakers of languages separate, distance from each other over time increases linguistically and spacially. With more quantity of distance and time of separation, communication eventually fails because the languages spoken by the two separated speech communities change in quality from the earlier, common form. On the other hand, when speakers of two languages are adjacent, with communication between them constant, their languages, even if they are different, will tend to converge because time or space bridges, rather than increases, the gap of communication. For instance, if in the NR node the percentage is generally higher, then any slight variation draws attention. This is clearly shown by SiSuumbwa, which, though its speakers have been adjacent with the NR languages for a long time, maintains a visible difference in shared retention, in the 70s, while the neighbouring NR languages are consistently in the mid- 80s or higher (See *Table 4.1*).

4.1.2.2 Lexicostatistical subgrouping: Analysis and discussion of results

Lexically, the statistics show that Zone F excludes five original members, namely ɪcɪWʊʊŋgʊ, KiBende, KiiRaŋgi, KeeMbuwe and KiLooŋgo. Of these, KiLooŋgo was normally ignored in the past and therefore it did not feature in any zone, except for mentions in anthropological or archaeological studies (Abrahams 1967, Soper and Golden 1969). On the other hand, the other four are the same languages which have been a focus of affiliation scepticism for some time, from being not known well enough (Nurse (1979a:28-9), Nurse and Philippson 1980:47-8), to that of being reasonably known enough to warrant some conclusions, although a systematic study had not been conducted (Nurse 1999:10-1). SiSuumbwa is borderline between known and unknown, for some time now characterized by uncertain statements of affiliation and history.

Those included in Zone F are not that homogeneous either since there are clear subdivisions based on the different shared retention rates as shown in *Figure 4.1*. The shared retention rates among different levels are summarized in *Table 4.15*, and reproduced below for convenience.

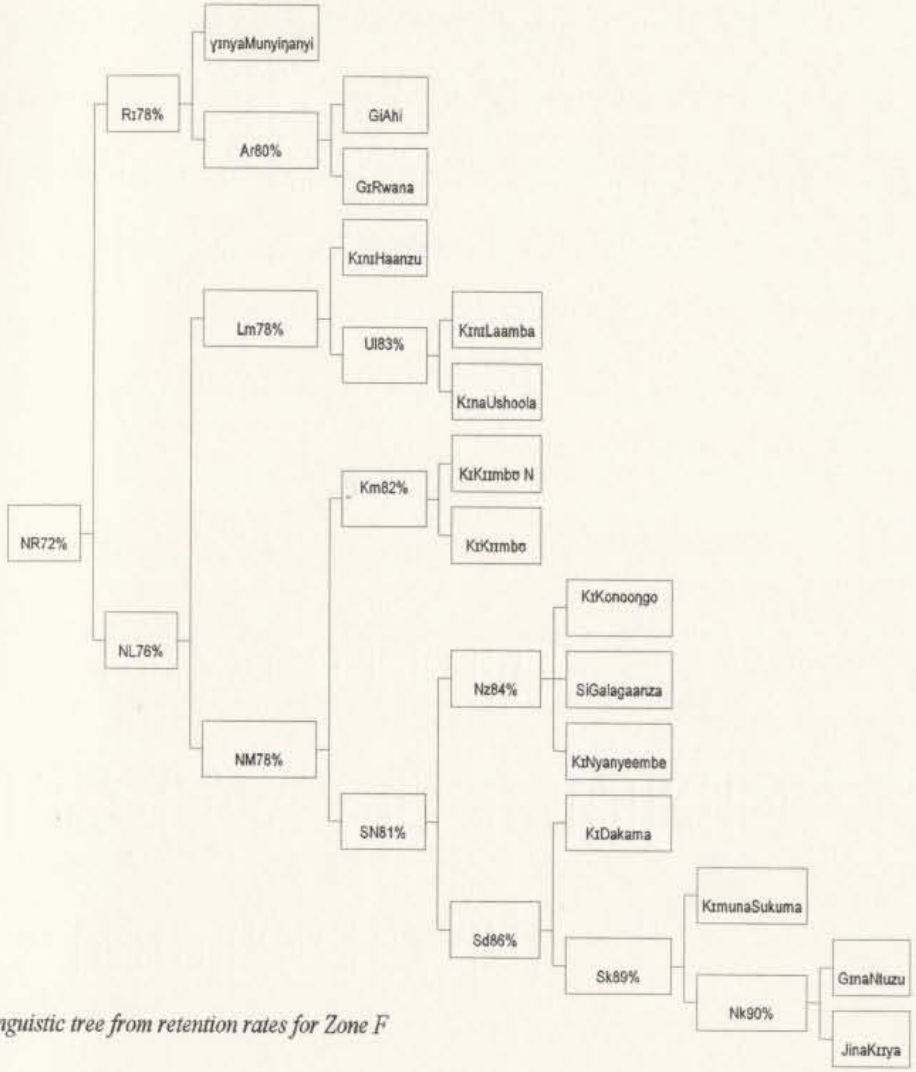


Figure 4.1 Linguistic tree from retention rates for Zone F

(138)

Nk = 90	Ul = 83	Lm = 78
Sk = 89	Km = 82	Rɪ = 78
Sd = 86	SN = 81	NL = 76
Nz = 84	Ar = 80	NR = 72
Sy = 84	NM = 78	

From the shared percentages in (138), a linguistic tree of 14 nodes can be constructed (*Figure 4.1*). It is encouraging to note that the traditional groupings within Zone F are more or less the same, except that their internal relationships show the hierarchy in which the different dialects are associated. The traditional Zone F listings, as in other zones, did not suggest any hierarchies between the dialects identified, as though assuming that all dialects/languages were coordinate partners.

An important point noted by Nurse and Philippson (1980:38-9) with regard to the 76 languages they investigated concerns influence due to closeness, regardless of genetic affiliation, whereby higher similarities are registered with closer neighbours as higher percentages of shared retention, and consistently lower with distant ones. This proximity hypothesis in raising or lowering retention rates is informative with regard to cut-off points. In our data, the shared percentages depended on whether the neighbour had a higher or lower percentage rate of retention, suggesting that a language with a higher figure on its own would have an even higher one if its neighbour had an equal or higher rate, and vice versa. For instance, KeeMbuwe would show higher shared rates if it were surrounded by equally Bantu languages with higher retention rates, while KiLoongo would show a lower rate than is currently shown, because it is surrounded by KiSukuma, with higher retention rates. In other words, if a language which had lost much of its inherited vocabulary came in contact with, and borrowed from, languages which had a higher retention rate, it would itself seem to have retained a higher retention rate. The converse is true with regard to the lowering effects of

neighbouring languages. KIKIImbu is phonologically conservative and stable, but it is surprising that the retention rate is lower than expected. The likely explanation is contact with KINyamweezi which lowered the count by replacing the original words. It may be the case that KiBende would have a lower retention rate if it were not adjacent to KIKonooŋgo or SiGalagaanza.

Because of this scenario, the KISukuma (89%), KINyamweezi (84%), SiSuumbwa (84%), KIKIImbu (82%), KInILaamba (78%) and KIRImi (78%) groups' internal rates would be different if they were not surrounded by languages which tend to lower or raise their shared percentages. And since this larger group of 6 subgroups is characterized by high retention rates, its rate would be even higher than the current 83% average between them if they did not hypothetically experience that contact. With this high average figure for the 6 groups, the exclusion of IcIWUUŋgU, KiBende, KiiRaŋgi, KeeMbuwe and KiLooŋgo at 70% or less, is justified. Otherwise, many languages including those outside the zone would behave like the immediate sister languages of Zone F.

This also raises the question of the role of mutual borrowing in contact situations. For instance, KInIHaanzu's proximity with JinaKIIya makes its overall figures closer to those of KISukuma-KINyamweezi than to some of the members of its KInILaamba group, as shown in *Table 4.1*. This supports and explains the similarity of some phonological features described in Chapter 3, illustrating the case pointed out by Hinnebusch (1999:176-8) about

similarity due to language contact. When speakers of different languages interact often, the relationship leads to the diffusion of vocabulary and its phonological features from and into those languages. Thomason and Kaufman (1988:53) actually suggest that features can be borrowed from one language into another even when they do not fit the typological nature of the other language. They may later become significant innovations in the recipient language. When the languages in question are typologically the same, and the speakers have been adjacent and interacting for a long time, detecting borrowing between them is a challenge, so that any slight difference is significant.

4.1.2.3 Lexicostatistics, absolute chronology and linguistic grouping in Zone F

While the results closely resemble the traditional classification of the obvious individual groups like SiSuumbwa, KɪSukuma, KɪNyamweezi, KɪRɪmi, KɪKɪmbʊ, ɪCɪWʊʊŋgʊ, KiiRaŋgi, KeeMbuwe and KiBende, to a great extent expected zonal unity is undermined. In the linguistic tree, some languages are excluded because of retaining lower vocabulary percentages than expected. The variation should be small if languages really belong to the same group. Because language relationships can be graded in a continuum of closeness rather than viewed as discrete entities, including or excluding any member like SiSuumbwa and KeeMbuwe from Zone F is a difficult decision, as they have relatively higher percentages than the rest of the excluded varieties. This indeterminate division into discrete units between one language or dialect and another needs an interpretation of the patterns observed in a historical perspective based on what really happened.

The relationships between languages shown in the tables above so far suggest that the prospects for Zone F maintenance are improved. Chapter 3 greatly undermined the unity of the zone by showing how irregularly the major phonological processes are distributed in Zone F, indicating a doubtful genetic relationship. The vocabulary in this chapter presents a better picture by showing that, although the lexicostatistical application excludes some members, the remaining ones show some cohesion. But as pointed out above, lexical unity may also have been mainly facilitated by the lengthy proximity of the speech communities. The effect is seen in how the rates of shared vocabulary are modified when languages are adjacent, as observed by Nurse and Philippson (1980a).

For instance, while some traditional classifications group KInILaamba, KIRImi and KIKIImbU as one unit, on the one hand, and SiSuumbwa, KISukuma and KINyamweezi on the other as core units of Zone F, our study displays different hierarchies as shown in *Figure 4.1* (Cf Nurse 1979a:28). The levels in this lexicostatistically based pattern indicate that, SiSuumbwa is out of the picture, a situation which Nurse (1979a) notes as an influence to SiSuumbwa, as an F member, by the GiHa and KiZinza group. The remaining ones, KISukuma, KINyamweezi, KInILaamba, KIRImi and KIKIImbU branch in a complicated way. The following are the results of the patterns in *Figure 4.1*. The first split removed

KIRImi from the larger group 1089 years ago, in 910 AD, indicated by 72% of shared vocabulary, illustrated in *Table 4.16* for all the possible split times in our study[2].

Table 4.16 Time estimates of language separation using index of .86 for 1000 years expressed as a percentage rate of retention (Ret) of shared vocabulary.

Ret %	Years	Ret %	Years	Ret %	Years	Ret %	Years	Ret %	Years
90	**349**	80	**740**	70	**1182**	60	**1693**	50	**2298**
89	**386**	79	**781**	69	**1230**	59	**1749**	49	**2365**
88	**428**	78	**824**	68	**1279**	58	**1806**	48	**2433**
87	**462**	77	**866**	67	**1328**	57	**1864**	47	**2503**
86	**500**	76	**910**	66	**1377**	56	**1922**	46	**2574**
85	**539**	75	**954**	65	**1428**	55	**1982**	45	**2647**
84	**578**	74	**998**	64	**1480**	54	**2043**	44	**2722**
83	**618**	73	**1043**	63	**1532**	53	**2105**	43	**2798**
82	**658**	72	**1089**	62	**1585**	52	**2168**	42	**2876**
81	**699**	71	**1135**	61	**1639**	51	**2232**	41 40	**2956** **3038**

(139)

Nk = 90	Ul = 83	Lm = 78
Sk = 89	Km = 82	RI = 78
Sd = 86	SN = 81	NL = 76
Nz = 84	Ar = 80	NR = 72
Sy = 84	NM = 78	

[2] The years in this table use the formula $t = log\ C / 2log\ r$ introduced in Chapter 1, where t is the time of separation in years, obtained by calculating C, a percentage of the retained words from a list of 100 words, and r is a given constant .86, which is assumed to be a ratio of 86 words retained out of 100 after the initial 1000 years have passed.

The percentages in (139) are those calculated from *Tables 4.1* to *4.15*, as shared vocabulary between the nodes identified. They are repeated here for ease of reference. From the tree, after KIRImi split, the remaining group split into two again, 910 years ago, in 1089 AD, when KInILaamba diverged, as shown by the shared vocabulary of 76% at that level. In 1175 AD, KIKIImbʊ diverged from the remaining group, shown as a retention rate of 78%. It was at that same period that KInIHaanzu splintered from the larger KInILaamba group which had split earlier. When KIKIImbʊ split from the remaining larger group, it was the KINyamweezi and KISukuma groups that still remained together. In 1300 AD, or 699 years ago, they split, KINyanyeembe, KIKonoonjgo and SiGalagaanza as one group, and KISukuma and KIDakama another, shown with a shared retention of 81%. KIDakama split from the rest of the KISukuma dialects later, in 1499, or 500 years ago, with a shared retention of 86%. Modern KISukuma dialects began to be differentiated in 1613 when KImunaSukuma split from the others, some 386 years ago, indicated as 89% of shared vocabulary. And in 1650, or 349 years ago, JinaKIIya and GInaNtuzu separated (90%).

How historically true are these years of splits? This is a different matter which the method itself can only be credited for proposing. The rest may depend on two things: availability of corroborating external evidence and the interpretation of the results, especially of any unexpected deviations from the facts of known history.

To begin with, dates by other researchers concerning Zone F or its members can put these lexicostatisically based calculations in perspective, although these are not many. Neither are they reliable, since they are also only hypotheses of the events. For instance. Ehret (1984:489) gives some dates for part of Zone F. Although he does not state how he got those approximate years, their similarity with ours is striking and interesting, as compared in (140):

(140)

Ehret's estimates (1984:489)	*This study's lexicostatistical figures*
By 500 AD: Division of Proto Takama into 3 groups: F21/F22, F24 and F31/F32	By 1300 AD: F32, F31, F24 and F21/F22 divided, though F32 split in 910 AD
1100-1600 AD Divisions of KiWembere speakers (KInILaamba and KIRImi)	910: Split of KIRImi from the rest of Zone F core group

The margins of error of the dates in (140) depend on the method used and the assumptions of the beginnings of humanity. From the years by Ehret indicated above, lexicostatistics is not that bad for giving rough estimates of linguistic relationship, just as it works to some reasonable degree when the lexicostatistical results are subjected to glottochronology, as a measure of absolute dating applied to the nodes. Even Carbon 14 depends on ideal conditions for the accuracy of its results. If the historical facts of an area are known by other means, then the figures of lexicostatistics begin to make sense. This is consonant with the metaphor of Carbon 14: if it is contaminated, the years obtained may not match the actual chronology. In linguistic terms, when a speech community remains in relative isolation, maintaining

constant communication between its members, the language is unlikely to change in an irregular way. This will be reflected by high retention rates. This is an ideal situation which rarely obtains in reality, except in a few rare cases (Ross 1998:142). On the other hand, when movements and interactions of people are numerous, especially when there are social, political and economic changes and upheavals like wars, pestilence, conquests, plunder, invasions and repression, linguistic change over time is likely to be greatest, reflected by lower retention rates in the intermingling speakers of different languages. Any figures given therefore, whether as retention percentages or glottochronological years, depend on all factors impinging on the ideal situation. This makes lexicostatistics and glottochronology similar with other methods which impose conditions for their reasonable accuracy. Failure to observe those conditions does not make the methods worse than others.

When those conditions are observed, the following ideal divisions are used to rank linguistic levels from dialect to macrophylum. The only problem here is that the system of assigning retention rates and linguistic levels is not uniform, suggesting that linguistic science in the area of dating is still in its infancy. For example, Crowley (1997:184) ascribes the different assignment of retention rates and linguistic levels to idiosyncratic choices by practicing linguists. In *Table 4.17*, two systems have been used for classifying and dating Pacific languages.

Table 4.17 Language, dialect, time of separation and shared percentage (After Crowley 1997:182, 184)

System A			System B	
Approximate years of separation	Level of subgrouping	% shared cognate core vocabulary	Level of subgrouping	% shared cognate core vocabulary
0 -500	Dialects of one language	81-100	Dialects of a language	81 - 100
500 - 2500	Languages of a family	36-81	Languages of a sub-family	55 - 81
2500 - 5000	Families of a stock	12-36	Subfamilies of a family	28 - 55
5000 - 7500	stocks of a microphylum	4-12	Families of a stock	13 - 28
7500 - 10000	microphyla of mesophylum	1-4	Stocks of a phylum	5 - 13
10000 -	mesophyla of a macrophylum	0-1		

Table 4.18 Median rating and retention dates between languages (After Ehret 2000:288)

Approximate median dating in BP (Before the Present)	Retention rate between languages %	Approximate median dating in BP (Before the Present)	Retention rate between languages %
1000	74	6000	16
2000	55	7000	12
3000	40	8000	9
4000	30	9000	7
5000	22	10000	5

But sometimes these systems differ significantly. It is indeed disturbing to note that the same labels like 'language', 'language family' or 'linguistic stocks' are used to refer to different retention rates and different linguistic levels. Ehret (2000) provides another scale as a ratio of retention to time, shown in *Table 4.18*. Compared to the rates in *Table 4.17*, the numbers are not identical, although they should be, where the same concept is used to mean the same thing.

This inconsistency in the value of units, labelling and therefore criteria for subgrouping may be one of the reasons why some linguists regard the twin methods as a waste of time. Practically, it remains true that sloppy application of method should not be confused with the method itself, which is quite good, as good as the regularly used comparative method. The comparative method has its weaknesses. For instance, in dealing with genetically related languages it uses only regular correspondences. If material does not correspond regularly, then it is left unaccounted for, or is simply labelled 'borrowed' as Ross (1996:180) puts it.

While in Chapter 3 the phonological picture suggested similarity due to convergence of adjacent languages, this part of quantitative evidence using lexicostatistics and glottochronology suggests divergence of a once unitary language. Ehret (1984:497) interprets the situation in the same way: from Proto Takama to the various groupings which later gave rise to F21, F22, F24, F31 and F32. Nurse (1999:3), on the other hand, uses the metaphor of a limited version kaleidoscope, a tube of mirrors reflecting constantly changing

patterns of colour. In this metaphor, the languages are in constant flux, diverging and converging, splitting and merging as circumstances surrounding the speakers change through time and space, with individual speakers, in small or big groups, criss-crossing familiar paths rather than blocks of languages moving uni-directionally, replacing other languages as they pass. Qualitative evidence based on lexical innovation sheds yet more light on the linguistic history of Zone F, particularly SSN, as various speakers of different linguistic groups interact in an endless process of human survival.

4.2 QUALITATIVE EVIDENCE IN LEXICAL INNOVATION

This section focuses on lexical innovation as a linguistic mechanism which serves to isolate one language from another, as evidence of independent historical evolution. If such innovation is shared by a set of languages, then it is assumed that those varieties share a common history from the past and therefore a genetic relation between them can be justified. Such innovation is evaluated in terms of three aspects: borrowed items confined within a single group only; shared and consistent morphological similarity among language varieties with no other reason for that resemblance except evolution from the same path from a common ancestor language; unique lexical creations which cannot be attributed to chance between any two or more languages/dialects except to a common historical path, even when an existing source is present, but is not known. Nurse and Hinnebusch (1993:285), Batibo (1992, 1996), Schoenbrun (1997), Ehret (1999) among others, utilize this technique in tracing the history of a group of languages.

The minimal unit of analysis used is the dialect, while the maximal grouping is Zone F. In-between, the intermediate levels are examined, each one indicating its unique innovations that purport to join a number of member linguistic sub-units. By definition, the dialect is expected to be unique by having a feature or set of features which are not found in the other sister dialects belonging to the same higher level that unites them, a language, as their parent. On the other hand, Zone F may be identified by the isolation of some key innovations displaying two essential characteristics. Firstly, those features peculiar to Zone F must run throughout the members of the group without exception so that affiliation, existence or validity as a Zone is displayed without any reasonable doubt, and secondly, those features should not be found in other zones which form Bantu. To accomplish the task of comparison, the following method was employed in the identification, selection, and use of lexical items.

From the basic list of the 1036 words, not all could be utilized for comparison. Only about 400 or so were actually selected as useful. 200 or so were judged to be inherited from Proto Bantu and therefore they were excluded, unless some special interest emerged. Inherited words as common items across a number of languages are normally realized differently in matters of detail from one language to another due to their different paths of historical development. Such common vocabulary appeared in almost all 22 language varieties, and it was easily recognizable in form and meaning in other Bantu languages beyond Zone F as well. As inherited items, they could not be used because they do not show any uniqueness which would help isolate Zone F from the rest of the other zones.

From that list of 1036 words, an additional 400 or so words could not be used at all because of some inconsistencies, which can be categorized into at least five groups. Firstly, verbs of motion in many languages, such as those referring to 'run', 'lift', 'jump' seem too amenable to inconsistent innovation, so that each language variety in extreme cases had its own word, depending on the shade of meaning an informant happened to remember readily. Difference of item in this case was not necessarily an indication of different origin.

Secondly, some words were simply ambiguous, and one response was as acceptable as the other depending on which item an informant picked from the range of several possibilities available to him/her at the moment. Hence, a difference of morpheme meant two things: different origin or different concept. For instance, a word like 'cut' in JinaKIIya would be gʊ-tema, gʊ-βuta, gʊ-cheemba, or gʊ-tIna, gʊ-jega, depending on what object or how that object was cut, or both. Another interesting word was 'unripe, half-grown'. In JinaKIIya, as in other speech communities specializing in a particular activity like farming, to be 'unripe' is not enough. It depends on what object is unripe. For instance, it can be -nagana (for vegetables and other fruit eaten raw like cucumbers and their families); -tIIndI (millet and maize stalks); ji-deema (baobab young tree only); ma-noga (groundnuts/peanuts only); and -βIsI (fruit, wild and cultivated, like water melons, oranges). A concept like 'to teach' also caused problems of choice among possibilities, although it did not seem ambiguous at first. The response to that one depended on what was taught and/or for how long, as the following illustration from JinaKIIya shows: gʊ-laaŋga (general instruction, short or long term); gʊ-

tooŋga (specific to one occasion only, normally for a short duration); gʊ-heembeka (used in medicine only as long term instruction which can take many years, although it can be extended to other types of specialized or exclusive instruction as well); gʊ-fuunda (used for girls only in relation to teachings of family life and its preservation); gʊ-hana (used for the instruction of secret subjects).

Thirdly, taboo and sacred words like those referring to private parts and fluids emanating from them commanded a high innovation rate which was inconsistent with the straightforward referential meanings. For instance, in some languages, 'sperm, semen' was often not translated, and when a response was provided, its root was the same as either for water or urine. Other words in this category included 'copulate', 'testicle', 'dead person', 'god', and 'spirit'. With such concepts, euphemisms are more common than the conceptual ones, which, for many, are unknown or too embarrassing to mention to strangers.

Fourthly, onomatopoeic words like that referring to 'cat' as nyau, or nyaaβu were ignored since they could be found in other areas beyond Zone F as well.

Finally, some of the concepts or objects were simply not known to either the informants, the researcher himself, or to both. These were not translated very well, not because the word did not exist, but simply because the participants had no clue what the word was talking about.

Among others, these included the names of some animals, trees, or birds which were either not known, have been forgotten, or have not been seen.

With this scenario in mind, it becomes obvious that the critical list of words can be quite small and yet significant enough for isolating a linguistic group. In some cases therefore, one word may be useful in a set of languages and not in others, while some words can cut across linguistic sub-groupings displaying clear sub-divisions by difference of reflex form.

On the other hand, when lexical innovations in one group are totally absent or their status questionable, serious doubts of validity and reliability of classification are raised. A historically valid linguistic grouping is expected to be open to observation and scrutiny, based on accessible evidence like innovation. This does not mean, however, that absence of evidence or clues is indicative of absence of historical connection in a contested case. The cases of doubtful historical connection are illustrated in some words below by question marks. Doubt only emphasizes the point that a word must withstand rigorous tests to qualify as a useable item in classification.

For comparative purposes, Nurse and Philippson's 1972 list is used where 100 language varieties were extracted from CBOLD[3]. In addition, Nurse's unpublished field notes have

---

[3] Comparative Bantu On-Line Dictionary under the direction of Larry Hyman, University of California at Berkeley, with contributions by participants from all over the (continued...)

been used in many cases, especially with regard to those languages which are not included in CBOLD, like CiGogo (G11). One limitation encountered in using the CBOLD list and which readers should be aware of is the use of an orthography limited to symbols for 5 vowels only, excluding the common lower high /ɪ/ and /ʊ/, especially for the 7V languages. In addition, the consonant inventory is limited, based on the KiSwahili orthography of 24 letters (a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,r,s,t,u,v,w,y,z), from the Roman alphabet which was acquired through English, but without the 'x' and 'q'. Vowel length is also not indicated consistently in the CBOLD list, phonologically or phonetically. The justification for such inaccurate recording is understandably a historical one, because most of the informants who prepared the lists themselves had the 5-vowel and 19-consonant KiSwahili writing system in mind when they transcribed their results from their mother tongues. KiSwahili does not show vowel length in its writing system[4] either. Linguistically, showing short vowels only as if there is no length contrast is unfortunately unacceptable because it misrepresents both phonological and phonetic facts. For instance, the consonant inventory used in the orthographies of all the transcriptions does not include some other common phonemes like /β ɸɣ x/, which are quite widely distributed outside KiSwahili and English. The status of /l/

---

[3](...continued)
world and found at *http://www.linguistics.berkeley.edu/CBOLD* (in 2000)

[4] There is disagreement on long vowels in KiSwahili, although there are indications that the distinction is there (Batibo 1990, Batibo and Rottland 1994, Mpiranya 1995). For instance, baba, dada and papa for 'father', 'sister' and 'shark' respectively are appropriately baaba, daada and paapa. Whether these words are borrowed, onomatopoeic or that minimal pairs in the language cannot be found for them to solidify the contrast, is entirely another matter.

and /r/ is also problematic in some Bantu languages, where the two are sometimes used in free variation, often in a haphazard way. The most frequent liquid from PB *d in most of the Bantu languages of eastern Africa is /l/. This inconsistent representation of liquids is illustrated by some members of EJ and DJ groups. In these languages, the use of l/r is not uniform, even within one language variety, calling for a systematic study of their status in order to isolate the phonological from the phonetic and orthographic. For instance, Muzale (1998:xviii) chooses "r" as a generic symbol to represent both phonemic and orthographic examples for the whole of Rutara (some part of EJ). The only reason given to justify that choice is convenience. At times, this inconsistence of representation can cause serious and misleading interpretations as wrong vowel and consonant phonemes are used and assumed to stand for historical facts. And finally, some of the languages were recorded as if they were mono-dialectal. For instance, F22, oRuHaya, as it appears in comparisons only means that any one of the 4 dialects mentioned in this study or another was used.

4.2.1 Survey of qualitative evidence in Zone F

4.2.1.1 Dialects: 'buds' in the linguistic tree

As concrete linguistic realities, the 22 dialects investigated more or less fit the pattern of the discrete divisions known by the native speakers of those languages. Where a language has already been investigated and recorded by others, the divisions are also corroborated to a large extent, except for a few adjustments which are shown below. For instance, in addition to native speaker intuition and experience, KIRImi has three dialects (Olson 1964): KiiRaŋgi

and KeeMbuwe, though similar, have significant differences. On the other hand, the majority of the dialects of Zone F languages were only mentioned by previous scholars without being rigorously investigated and their similarities and/or differences identified and recorded in confirmation or rejection of the common wisdom taken for granted. Native speaker intuition can also be questioned if it is influenced by factors other than linguistic.

The languages which are fairly homogeneous include SiSuumbwa, which is formed by SiSiloombo and SiYoombe, although this does not mean that they are the only dialects in SiSuumbwa. The difference between KIKIImbʊ North and KIKIImbʊ South is also minimal. Such minimal variation is often brought about by surrounding languages impinging differently on them, depending on their locations and other sociolinguistic variables in an area. With this unequal exposure to different external forces which might also accelerate or trigger internal processes, each dialect becomes marked by either consistent lexical, morphological, tonal, or phonological differences on the one hand, or some combination of those markers, on the other.

This shows that each variety innovated differently as it took a different historical path. Some of these distinguishing features are unique to the individual dialects, while the others are shared by neighbouring dialects of other groups as well. Since the existence of the majority of these dialects is not in dispute, just a few cases to illustrate their independent histories will suffice.

One point to note however is that only one variety was used for KiiRangi, KeeMbuwe, ɪcɪWʊʊŋgʊ and KiBende. One justification for using only one form was the assumption that they have minimal variations internally, due to their speakers' expected dense social networks facilitated by their confined geographical locations, compared to languages like KɪSukuma or iGiHa, whose speakers occupy areas large enough to cause complete isolation and much easier separate linguistic developments. This generalization is, however, not always accurate, since there are other factors which make homogeneity difficult even when those languages or dialects are geographically adjacent. For the other languages, examples of dialectal difference are important to highlight, since such variation at the lowest levels forms the foundation for grouping and isolating the upper nodes of proto languages.

For instance, JinaKɪɪya is unique in having Dahl's Law dissimilation operating to the right if the usual left-hand target consists of a voiceless fricative, rather than the canonical Dahl's Law case of dissimilating the first of any consecutive voiceless stop syllables, as in ɪdatʊ < *-tatʊ 'three'. GɪnaNtuzu and KɪmunaSukuma adhere to the standard rule, while JinaKɪɪya takes a step further, as in ɪsaga < isaka < *-caka 'bush', or lʊʃigʊ < lʊʃikʊ < *-cikʊ 'day'. This is one important distinguishing marker for JinaKɪɪya.

On the other hand, it is only GɪnantuzU which does not allow the infinitive marker kʊ- (regularly changing to gʊ-) to be followed by a verb with an initial or short /i/ or /ɪ/, to form a glide. The initial vowel of that verb, /i/ or /ɪ/, as the case may be, is deleted, and the vowel

/ʊ/ of the infinitive also replaced by the higher /u/, as illustrated in *Table 4.19*. Apart from the glide-forming environment of the infinitive, other words with a potential glide are also affected.

JinaKɪɪya uniformly forms a glide with the initial /i/ or /ɪ/ of a verb and /k/ voices to /ɰ/ consistently, as in GɪnaNtuzu, while KɪmunaSukuma also forms the glide consistently, but additionally and uniquely for this group, maintains /k/.

*Table 4.19 Infinitive *kʊ- as an important dialect morphological marker in KɪSukuma*

Dialect ☛ Proto Bantu ↓	*GmaNtuzu*	*JinaKɪɪya*	*KmunaSukuma*
*-yɪtɪk- 'answer a call'	gudɪka	gwɪdɪka	kwiidɪka
*-deg- 'avoid, dodge'	guliga	gwɪliga	-
*-yɪt- 'call'	gutana	gwɪtana	kwiitana
*-tʊɪk- 'carry on to head'	gudɪɪka	gwɪdɪɪka	kwiidɪɪka
*-yij- 'come'	guza	gwɪza	kwiiza
*-yiŋk- 'give'	guɲa	gwɪɲa	kwiiɲa
*-yigu- 'hear'	gugwa	gwɪgwa	kwiigwa
*-yit- 'pour away'	guta	gwɪta	kwiita
*- 'squat'	gutʊʊnda	gwɪtʊʊnda	kwiitʊʊnda
*-yib- 'to steal'	guβa	gwɪβa	kwiiβa
*-yɪb- 'to forget'	gwɪɪβa	gwɪɪβa	kwɪɪβa
*-yiŋgɪd- 'to go in, enter'	gwiiŋgɪla	gwɪŋgɪla	kwiiŋgɪla
*-yɪm- 'to stand'	gwɪɪmɪɪla	gwɪɪmɪɪla	kwɪɪmɪɪla
*-gʊɪna 'crocodile'	ŋuna	ŋwɪna	ŋwɪɪna
*-yibi 'thief'	ŋuβi	ŋwɪβi	ŋwiiβi

The rest of the language varieties are treated in the main section using lexical innovation to show that they developed together or differently, and hence they are the same language or they are independent dialects of a language. For others like SiSiloombo and SiYoombe on the one hand, and KiLoongo on the other, the lexical and phonological differences indicate that they might actually belong to different languages, rather than dialects of one language, as shown below. The shared percentages in the nodes obtained in section *4.1.1* above and displayed as tables as well as showing a linguistic tree, are used to examine the justification of the results against known historical facts about Zone F. Such a test also validates the lexicostatistical groupings as historically significant as well.

The classification of linguistic levels based on shared innovation in vocabulary which purports to define identified clusters is tested against words from other languages. Such words outside a given group are examined to find if there is any indication of relation, especially in cases of borrowing and genetic relation. In other types of innovation other possible sources are suggested. The final part in each linguistic node summarizes the observations as a whole and comments on the historical validity of such qualitative measures.

4.2.1.2 Dialect clusters: hierarchical nodes of historic languages

In the process of lexical analysis below, the vocabulary which is identified stands out as peculiar only to that group under discussion. The vocabulary can be unique in two ways: belonging exclusively to that cohesive group as inventions or having words which are not

found in its larger group's lexicon, but are shared by outside languages because of areal influence, borrowing or genetic affiliation peculiar to it. In each language or language group analyzed, the unique creations (inventions) precede shared vocabulary. Unique creations are those words which are not inherited from Proto Bantu and are not found elsewhere except in that language or dialect. The only drawback with the 'uniqueness' label is that a unique word may not appear in other dialects, not because it is absent in those languages, but because those languages which might show the same unique word are not included in the sample of languages being used in the comparisons. This limitation in access to all data makes any conclusion reached here only tentative rather than an absolute fact.

On the other hand, shared innovation may refer to semantic or peculiar morphological innovations of inherited words, or loans from one language to another. As pointed out above, phonological innovations are not counted, although they may be listed to display an interesting pattern. Where appropriate, some comments are supplied to add more context to the words.

To facilitate actual frequency in shared vocabulary, the dialects are not counted in the final tallies. The whole group is listed, unless only one dialect displays the word. For instance, if one word occurs in F21 in all three dialects, then one observation is counted rather than three, since we are dealing with larger patterns. In other words, the total number of frequencies will equal or be less than the total number of groups observed in a linguistic grouping like Sk

(GInaNtuzu (F21b) and JinaKIIya (F21c) which form a node of 90% of shared vocabulary in the lexicostatistical table of section ***4.1.2.1*** above.

The method used here, therefore, involves three stages: first, it lists all the dialects in which a lexeme occurs, groups those occurrences into their respective linguistic groups which are judged to be genetically valid[5] and then represents the results in a graph as frequencies. Those graphs are a rough and relative display which shows how the target group compares to each of the external dialect or group used. An absolute display would include all dialects from all Bantu languages. The graph only gives an approximate visual picture of how much the various linguistic subgroups share vocabulary.

Secondly, those dialects sharing the innovation are grouped together into dialect or language clusters in the Guthrie numbering system where necessary. Full names like Rutara, East Ruvu (ERuvu), Seuta are used as conveniently short labels especially in groups which span different digits. For instance, Seuta includes G23, G24, G31, and G34, making a simple alpha-numerical representation cumbersome. Kilombero is G50, and therefore it is easy to represent it as G50 rather than by the long name because all its members are included. The names of these groups are given in the list of abbreviations. For convenience, these names and the

[5] The linguistic groups of eastern African languages which are fairly genetic can be found in the proposals of Nurse (1982, 1988, 1994/5, 1999), Nurse and Hinnebusch (1993), Muzale (1998), among others. These groupings are often changing as better analyses and understanding become available. Their major function is therefore mainly referential and tentative until definitive answers are finally assembled.

languages they represent are given in (141). They are used interchangeably with their alpha-numerical representations.

(141)

Western Highlands (DJ60) = KinyaRwanda (DJ61), KiRundi (DJ62), iKiFuliiru (DJ63), KiShuβi (DJ64), KiHangaza (DJ65), iGiHa (DJ66), KiVinza (DJ67)
North Rutara (EJ11-14) = Runyoro (EJ11), RuTooro (EJ12), oLuNyankole (EJ13), oLuCiga/oRuCiga/RuCiga (EJ14)
South Rutara = oRuNyambo (EJ21), oRuHaya (EJ22 (RuZiba (EJ22a), RuHamba (EJ22b), Runyalhangiro (EJ22c), RuHyoza (EJ22e)), RuZinza (EJ23), RuKereβe (EJ24)
Suguti (EJ25) = KiJita (EJ25a), KiKwaya (EJ25b), KiRegi (EJ25c), CiRuri (EJ25d)
North Nyanza (EJ15-EJ17) = LuGanda (EJ15), oLuSoga (EJ16), oLuGwere (EJ17)
Luhya (EJ30 and EJ41) = LuMasaaβa (EJ31) = LuGisu/LuKisu (EJ31a/b), Luβukusu (EJ31c1), oLuSyan (EJ31d), oLuTachon (EJ31e), oLuDadiri (EJ31f), LuBuya (EJ31g), LuWaŋga (EJ32a), oLutsotso (EJ32b), LuMarama (EJ32c), LuKisa (EJ32d), LuKabarasi (EJ32e), LuNyala (EJ32f), LuNyore (EJ33), oLuSaamia (EJ34), LuXaayo (EJ34a), LuMarachi (EJ34b), oLuSoŋga (EJ34c), LuNyuli (EJ35), LuLogooli/LuRagooli (EJ41), Lwldaxo (EJ41a), Lwlsuxa (EJ41b), oLuTiriki (EJ41c)
East Nyanza (EJ42-EJ45) = KiNgurimi (EJ401), Kilkizu (EJ402), KiKuria (EJ43), iKiZanaki (EJ44) including varieties like iKilsenyi (EJ44b), KiNdali (EJ44c), KiSiora (EJ44d), KiSweta (EJ44e), KiRoba (EJ44f), GiRango (EJ44h), KiSimbiti (EJ44k), KiShaashi (EJ44l), KiHacha (EJ44m), KiNata/Kilkoma (EJ45), (eKiGusii (EJ42))
Thagicu/Central Kenya (E50) = Gɪkʊyʊ (E51), KiEmbu (E52), KiMeru (E53), KiTharaka (E54a), KiCuka (E54b), KiKamba (E55) and KiSonjo (E46)
Chaga/Kilimanjaro-Taita (E60, with or without E74)KiRwo/KiMeru (E61), KiSiha (E611), KiChaga (E62), KiMachame (E62a), KiWunjo (E62b), KiRombo (E62c), KiWoso (KiBosho) (E62d), KiSeri (E62e), KiKeni (E62f), KiArusha (E63), KiKahe (E64), KiGweno (E65), KiTaita (E74) = KiDaβida (E74a), KiSagala (E74b)
Seuta (G20), (G30) = KiShambala (G23), KiBondei (G24), KiZigula (G31), Kiŋgulu (G34)
West Ruvu (G10, G39) = CiGogo (G11), KiKagulu (G12), KiSagala (G39)
East Ruvu (G30) = Kiŋhwele (G32), KiDoe (G321), KiZalamo (G33), iKiLugulu (G35), KiKami (G36), KiKutu (G37), G38 CiVidunda
Sabaki (G40 and E71, E72, E73) = KiMwani (G401), KiMakwe (G402), CiFundi/KiShirazi (G403), KiTikulu (G41) = (Kitikulu (G41a), KiMbalazi (G41b)), KiSwahili (G42) = (KiAmu (G42a), KiMvita (G42b), KiMrima (G42c), KiUŋguja (G42d)), KiPemba (G43) = (KiPʰemba (G43a), KiTumbatu (G43b), KiHadimu/ KiMakunduchi (G43c)), KiKomoro (G44) = (Kiŋgazija (G44a), KiNjuani (G44b)), Kiɸokomo (E71), KiDhaiso/KiSegeju (E56), MijiKenda = (KiGiryama (E72a), KiKauma (E72b), KiConyi (E72c), KiDuruma (E72d), KiRabai (E72e), KiRibe (E72f), KiJibana (E72g), KiKambe (G72h)), KiDigo (E73))
KiLombero (G50) = KiPogolo (G51), KiNdamba (G52)
Southern Highlands (G60) = eSiSaŋgu (G61), eKiHehe (G62), eKiBena (G63), KiPaŋgwa (G64), KiKiŋga (G65), KiWanji (G66), KiKisi (G67)
Corridor (M10 = Corridor-Fipa, M20 = Corridor Nyiha) = iCiPimbwe (M11), KiLuŋgwa (M12), CiFipa (M13), CiLuŋgu (M14), iCiMambwe (M15), iCiWanda (M21), CinaMwaŋga (M22), iʃiNyiha (23), iʃiMalila (M24), iʃiSafwa (M25), Iwa (M26), Tambo (M27), (ɪCɪWʊʊŋgʊ (F25))
Nyakyusa (M30) = ɪKɪNyakyusa (M31), CiNdali (M32)

Tanzanian CiNgoni (N10) = KiNdendeule (N101), KiNindi (N102), CiManda (N11), CiNgoni (N12), CiMatengo (N13), CiMpoto (N14)
Rufiji (P10) = KiNdengeleko (P11), KiRuihi (KiRufiji) (P12), KiMatumbi (P13), KiNgindo (P14)
Ruvuma (P20) = CiYao (P21), CiMwera (P22), CiMakonde (P23), CiMaciinga (M231), CiMaβiha (P25)

Where only a few members of a group show a lexeme, and others do not for whatever reason, then that group is represented in brackets, indicating that only some members displayed that word.

Thirdly, the list of all innovations is divided into two: unique creations and areal. "Areal" is a cover term for areal vocabulary, derivation, morphological innovation and borrowing, as indicated in the examples, and shortened to "areal vocabulary" in the text. A percentage is computed in each case to show the proportion of each. That percentage is another rough and relative indicator of how much a language innovated, and how much of its vocabulary is shared with other languages outside its zone. The measure is rough and relative because only limited vocabulary and language sample size outside zone F were used, rather than exhaustive lists of all possibilities. Where possible, the words are segmented to show basic morphemes, the roots, around which other morphemes are optionally attached.

4.2.1.2.1 Ntuzu KIIya (Nk) (90%) (GIIaNtuzu (F21b) - JiinaKIIya (F21c))

The unique count is 4 out of 14, or 29%. The remaining 71% is composed of words which are shared by other Bantu languages, both adjacent and far-flung ones.

(142) Unique vocabulary (4 words)

cure, (cool), heal **gʊ-pɪja** (vt), **gʊ-pɪla** (vi): unique creation? [6]
pronounce **gʊ-haya**:
slander, accuse falsely (often secretly) **gʊ-βʊʊla**:
slap (with front of open hand) vi/vt **gʊ-paala** (**ɪ-pɪ**): unique innovation? (same root as in M32[7]?, ku-pata?)

(143) Areal vocabulary, derivation, morphological innovation and borrowing (10 words)

apply by stretching **gʊ-koma** (F31, F32) -koma < Nk and spread, or vice versa?
be **-βiiza** G60 ku-vedza; Luhya -wica; E60 -iva?
bladder **ɪtuunji** (F21c), **ituunzi** (F21b): < *-tʊnd- 'urinate' by derivation
bowstring **lʊge** F23a/b lʊge; EJ40, o-ruge; E74a luga; Thagicu rugaa; Rutara oruga; Borrowing, < F23a/F23b < F21b/F21c < Zone EJ
hate **gʊ-kolwa** < *-kodʊ- 'become intoxicated': extension of meaning
iron F21c **jɪsɪɪnza** F21b **gɪsɪɪnza** 'the one which slaughters'? < *-cɪnj- 'butcher'?: unique, by derivation
mud, mire **teembe** EJ40 -tembe: borrowing one from the other, or from same origin?
sell **gʊ-jiinja** any relation with Thagicu ku-endia?
snore, snort (vi) **gʊ-ŋoola** (onomatopoeic?) (Thagicu -ŋora, -ŋorota; Luhya xuŋorela; EJ25 -ŋoroota; South Rutara ku-ŋorota; F24 uxu-ŋota[x]; Corridor uku-ŋoota; <*-gona: phonological innovation? Or is it a loan fro m Nilo-Saharan *ŋuur?

---

[6] The following abbreviations and symbols, explained in the abbreviations section, are repeated here as a reminder:

;	= separating different forms of a lexeme or concept in different languages
cf	= compare with these forms, which may be related or not
[ ]	= enclosing languages which do not form the complete set
( )	= enclosing related languages being compared to the rest
:	= explanation follows, especially type of innovation
?	= unconfirmed, uncertain or doubtful case

[7] M32 is a code for CiNdali, suggested by Swilla (1981, 2000), a native speaker of the language and a linguist, a suggestion which is a good addition, since Guthrie (1967-1971) did not include all languages/dialects. This code is adopted in this study.

[x] This word was found in the KɪKɪɪmbʊ list collected by Nurse and Philippson in 1972, although in the list of 1999, the informants of both north and south did not mention it. It also suggests borrowing from M11 or M12 since they share borders.

tortoise F21c **gulumaadi**, F21b **guumaadi** < Barbaig gumald: borrowing (cf PB *-kudu 'tortoise')

The connection of JinaKIIya with Luhya, East Nyanza (EJ40) and Thagicu languages raises serious questions of genetic affiliation. How much should a language share features with another for them to be regarded as genetically close, if first hand evidence is lacking? How can borrowing and genetic relationship be isolated if a pair belong to the same group typologically? The answer here lies in the employment of a multiplicity of evidence rather than relying on one form of evidence alone and elevating it to a final answer. For example, *seed* (*especially edible, not for planting*) F21c **ndete** E46 **ndetele**; EJ25a **entetele** (also occurs in Zambia as -tetele: accident or common origin? (Ehret, p.c.); EJ45 **chantetere**; EJ401, EJ42, EJ43, EJ45 **entetere** points to zones EJ and E origins because of the more elaborate forms there whereas in F21c the form is reduced. This is one indicator of source and origin.

4.2.1.2.2 KISukuma - (Sk) (89%) (GIaNtuzu - JinaKIIya - KIIIIIaSukuma)

This grouping can be termed 'traditional KISukuma' since, when that name is used, it is those dialects which are featured (although it by no means suggests that they are the only dialects forming KISukuma). Out of the 13 words, 4 are unique, or 31%. The rest, or 69%, are areal, shared with other languages and language groups.

(144) Unique vocabulary (4 words)

abdomen, belly, stomach **ŋuumbɪ:**
follow **-kʊʊβɪja**
pit, hole F21a, F21b **icooŋgo**, F21c **ɪcooŋgo**
spoil (a child by pampering) **-gegela**

(145) Areal vocabulary, derivation, morphological innovation and borrowing (9 words)

breast (of a woman) F21a, F21b **lʊ-noono**, F21c **lʊ-nooṇo** (North Nyanza) ɲondo; Thagicu ɲoonto; (Chaga) ɲodo: borrowing < E (credibility of the βaKaamba and other clans in βʊSukuma (Itandala 1979)? Common origin in the past since ɲonto/ɲondo is a Thagicu word? (Nurse 1979b:553)? Or is it a loan from non-Bantu languages: < Kamdang -tono (sg), ano (pl) 'breast'? (Stevenson 1991:351)
great, big, powerful **-taale** unique creation or semantic shift < Rutara -tale 'lion'?
hard **-diimu** (EJ40) ki-diɲu
in front of **βu-tooŋgi** *F23c* (Seuta) noŋge, N10 ku-loŋgi?, P10 nʊŋgɪ
kneel **-tuja** Thagicu -turia ndu/maru, (EJ40) -furya makoti
mourning **ŋʊʊŋgʊ** (any relation with Corridor impuŋgo, 'mourning'?):
pig **ṇʊʊmba** (any relation with (G50) mtumbi, 'pig'?): unique creation or areal vocabulary?
pipe (tobacco)[9] **lʊ-seke/lʊ-sege** :unique creation, or < *-cege 'horn', or borrowing: < Proto East Victoria Bantu (EJ40) *-sɛkɛ 'beer straw' < Proto Kalenjin *sɛk- 'beer straw' (Ehret 1971:98, 130)?
tomorrow **ntoondo** (why not nhoondo?) EJ25 mtondo; (Seuta) momtondo; Corridor mutondo: borrowing from M? Or inheritance from a common ancestor, but not Bantu? The formation of a prenasalized stop after the prefix mu- in KɪSukuma follows a regular pattern which distinguishes the N prefix. But here the rule does not apply, perhaps to distinguish the word from three words of the same shape which are tonally the same as well, with low tones: -toondo 'type of wasp; locusts at hopper stage; flesh wound' with a dictionary form of **ṇoondo**[10]

---

[9] KɪDakama has that word as isekeé/masekeé in Maganga and Schadeberg (1992), although the informant for this study gave nteemba which Maganga and Schadeberg mention in the vocabulary section as common in Tabora, presumably referring to SiGalagaanza, KɪNyanyeembe, and KɪKonooŋgo

[10] The topic of base words in JinaKɪIya and in other Bantu languages is explored in Masele (1996). For instance, -toondo is a root which is not a dictionary form, because such a form is marked in the sense that it is not recognized by a native speaker's mental lexicon.
(continued...)

trunk (of elephant) **ŋkoondo** (Sabaki), (Corridor) umkondo (these might be the only ones with an unambiguous lexeme[11] like that in KISukuma).
urine F21a, F21b **miine**, F21c **mɪne** (North Nyanza) ma-ɲe, (Luhya) ama-ɲi: Speakers from the same group, or some speakers from the EJ group entered F21 and spread the word? Borrowing? This word is the only one where 'urine' and 'sperm' match with EJ16, while 'urinate' in EJ is different from 'urine'. To show the distance from EJ16/17 and EJ34 from each other, and EJ34 from F21 in this word, EJ34 behaves differently in terms of the vowel ending in 'urine', and the word for 'urine' and 'sperm' being radically different. On the other hand, EJ17 displays a different word for 'sperm' bujula perhaps because it might be a euphemism. For the majority of the languages compared, 'urine' is derived from 'urinate'. For instance, 'urine' derived from ku-ɲala is -ɲali, while that derived from -suβaala is -su. Another common word here for 'urinate' is ku-tunda, with 'urine' being -tundi, -tusi, -tunzi, -tuzi. *Table 4.20* illustrates this pattern in EJ16/17 and F21.

Table 4.20 'Urine' and 'sperm' in F21 and EJ16, EJ17, and EJ34

Word	F21ab/c	EJ16	EJ17	EJ34
urine	m-iine/m-ɪne < ma-ine/ ma-ɪne	ma-iɲe	ma-ɲe	ama-ɲi
sperm	w-iine/w-ɪne < βʊ-ine/ βʊ-ɪne	ama-iɲe agazala 'bearing urine'	bujula	oβwehe

walk (take a) **-yeela** F23a,b -yeela; Thagicu gʊ-cera?, (Chaga) ku-sela?; E65-ira ira? is it < PB *-pɪt- 'pass'?
wall **ndugu** (EJ25) i-ndugu

---

[10](...continued)
Rather, such a form is obtained as a dependent morpheme when number, the diminutive or other process is involved: **ŋoondo** (generic, base): **ga-toondo** 'small wasp'; **ma-toondo** 'many, big wasps'.

[11] EJ41 (Maragoli/LuLogooli?) and M12 (CiMpoto), though do not undergo the homorganic nasal and stop process, do show the word as it is found in KISukuma. It is not clear whether EJ403 KiSuba displayed a misspelling in omokonondo or not. On the other hand, though N13, P13 and P14 do not use that word, the one they use undergoes the same proces: ŋkoŋga 'trunk (of elephant)' < mu-koŋga.

From the foregoing, it can be observed that KISukuma shares more words with some members of Corridor, East Nyanza (EJ40) and Thagicu than with other groups. Such shared vocabulary in the unique set of lexemes with KISukuma is striking, given their present geographical distances, especially Thagicu. Four interpretations can be posited here. Firstly, it might be borrowing from them (Corridor, East Nyanza and Thagicu) (most unlikely for current geographical reasons). Secondly, some speakers might have originated from them and the newcomers were influential enough to spread some words in KISukuma. This is a likely explanation, for recent historical reasons, especially with regard to Corridor, as explored in Chapter 5.

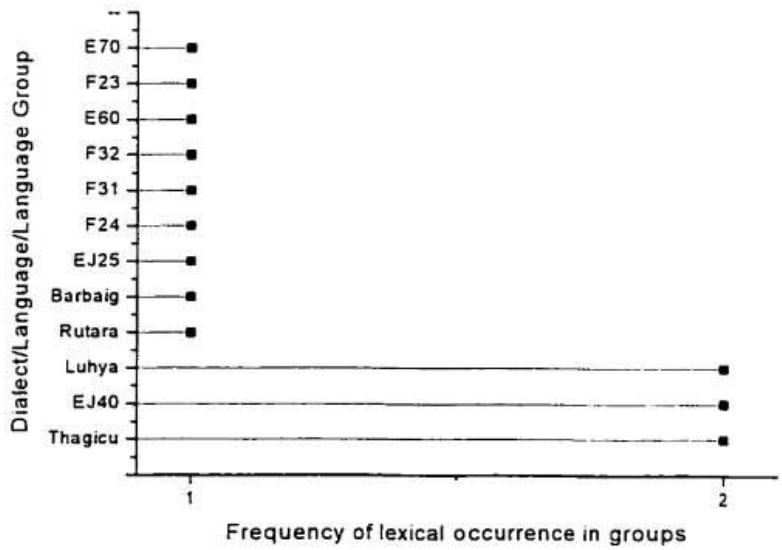


Figure 4.2 Areal frequencies between F21b/c and other languages

Thirdly, the languages, although they are different, might have borrowed from a common source. This is another possibility if, for a example, a powerful invader occupying a large area subjugated them together. Lastly, the possibility of a single origin, as proposed by Nurse (1999:20-1), that there was once a grouping Thagicu/F20/EJ, etc, which then split up is strengthened by Dahl's Law distribution among them, especially between Thagicu and F21. Thagicu like GIkʊyʊ and KISukuma share some important features linguistically which make them closer than KISukuma is to F22. In both F21 and Thagicu, 'return' is -ʃooka, -ʃooga, -syooka, or in F21c, -kiliiʃa 'rub' and -ogosa 'twist', nooɲo 'breast' is -kiiθa, nondo and -okoθa respectively in E55.

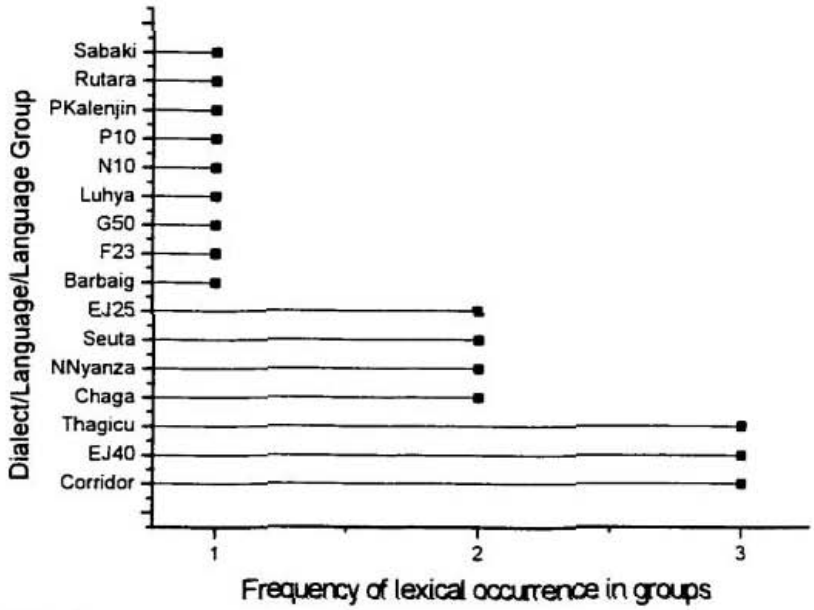


Figure 4.3 Areal frequencies between F21 and other languages

Nurse (1982:221, 1988:34) alludes to that close connection. Because of that similarity it suggests that they have at least two things in common, namely that their ancestors have been long separated from other East African Bantu languages and their routes of immigration patterns were separate.

Other important contributing sources are North Nyanza, Suguti (EJ25), Seuta and Chaga as shown in Figure 4.4 below What do they suggest: loans, or common history?

4.2.1.2.3 KISukuma - KIDakama - Sd (86%) (GIIaNtuzu - JiiaKIIya - KIIniiaSukuma - KIDakama) - KISukuma2

As a readjustment, the 'new KISukuma' or KISukuma2 should include KIDakama, while the plain KISukuma term excludes KIDakama in subsequent references. This inclusion of KIDakama is also supported strong by phonological evidence presented in Chapter 3. In this group, 3 words are unique (21%), and the rest, 79%, are shared, as shown below.

(146) Unique vocabulary (3 words)

elephant **m̥ʊlɪ**[12]
give light to **-twiima**, (F21c **-tɪma**) (F21b, from PB different morpheme)
leave, go away **-ɪŋga**

(147) Areal vocabulary, derivation, morphological innovation and borrowing (11 words)

beads **βʊ-salʊ** (F23a βʊsalʊ, F23b βusalo): EJ40, EJ25 uβu-saru; (DJ60) -saro; (Seuta), East Ruvu, (N10) usalu; < East Ruvu? Distribution concentrated along the central part of Tanzania as if the word is coastal, acquired during coast-hinterland long distance trading, then, just spread to EJ25 and EJ40, probably via the KISukuma speakers.
deny, refuse, say no **-lema** Seuta, (East Ruvu) -lem(el)a
fly (vi) **-lala** (North Nyanza) -papala?, (Rutara) -halala? Probably loanword from Cushitic?
hand, left **lʊmoso** (only one sub-group with class 11 marker lʊ- in F)
increase (vi) **-kwɪɪla** (Luhya) xu-xila?, (EJ40) kukera? semantic innovation < PB *-kʊɪd- 'go up' as in Kiswahili -kwea < PB *-*-kʊed- 'go up' ?
lend, borrow **-laanda** (EJ40) -randa

---

[12] Although Batibo (1992b:70) suggests that probably -puli 'elephant' is from *peel* 'elephant' from Proto Southern Nilotic, it is unlikely, because only the consonants match. In addition, /ee/ changing to /ʊ/ in KISukuma2 is not phonologically or phonetically motivated. If it is not a KISukuma2 innovation, then the source is not known because Hadza and Sandawe speakers do not use such a word for elephant, as one would expect from people who are synchronically more proximal to the KISukuma2 speakers and might have been better hunters at that time than the Proto Southern Nilotic speakers. Bubenik (p.c) suggests the same source of the Afro-Asiatic form as Arabic fi:l 'elephant'.

medicine, remedy **βʊ-gota** G50 m-gota, Corridor mu-kota,G60 (u)mu-goda, u-goda, (N10) ŋoda (name for 'tree', -kota in F31a/F31b kyota/ma-kota; F33 mooda; Barbaig geta (sg), gedig (pl) with DL: widespread Bantu word.
sick **-saatu, -saadu** (F21c), < -saata 'be sick' EJ24 ku-saaswa 'be sick' < -saata/saada < F21? < Barbaig miyand 'be sick'?
squat **-itʊʊnda, -ɪtʊʊnda** (F21c), (North Nyanza), (EJ40) -sundala?
sun, sunlight, daytime **lɪɪmi** (Chaga) idime? < Alagwa ɬehemi < Proto West Rift -liimi (cf Western Lakes (D40, DJ50, DJ60) -lemi 'creator, maker'? (Schoenbrun 1997)[13] EJ45 omwi?, E611 mwi?, P14 lumu?) (See Nurse 1979b:518)
take in from rain **-ʊʊβa**, F31 kw-iyʊʊwa; F32b -oova; Corridor u-kuuwa

East Nyanza (EJ40) is the single most important group at this level. Four words out of the 12 areal vocabulary, or 29%, are found in that group. This count exceeds the unique innovations within F21/F22b, suggesting that areal vocabulary is the norm rather than an exception. Such areal influence highlights the fact that the tree model alone is not appropriate in accounting for lexical inheritance. The non-Bantu languages are represented by Alagwa (Cushitic) and Barbaig (Southern Nilotic) of the Datoog subgroup. The words from these non-Bantu languages suggest that some of the unaccounted for words like -pʊlɪ (mʊlɪ) might

---

[13] A Zone D and DJ source, from Proto Savanna *-lemi 'creator, maker', as in D53 (Tembo) -rema 'create'; DJ61 rurema 'Creator; manifestation or type of imaana who has created what which exists'; DJ62 iremezo 'base, fundamental principle; ideal; army chief'. Schoenbrun (1997:212; 252-253) provides another plausible alternative to Proto West Rift ɬeemi(Batibo 1992b:64) because of D and DJ's typological proximity and the nature of the universality of the object, 'sun' as a least candidate for borrowing. The sun is also associated with the gods, and as a euphemism, lyʊʊβa is justified in remaining in KɪSukuma rituals and use the loan lɪɪmi instead. The plausibility of the D and DJ alternative is strengthened by the meaning 'creator, maker' while 'day' from Cushitic is weaker in semantic motivation. In addition, there is a strong ritual connection of ritual between KɪSukuma and Barbaig, and less so with any modern Cushitic group. In KɪSukuma lɪsɪɪda (lɪsɪɪta) 'god' < Barbaig aseta 'sun' is also common. In addition, ɬeemi is 'day' rather than 'sun' which can be closer to a higher concept like 'creator'.

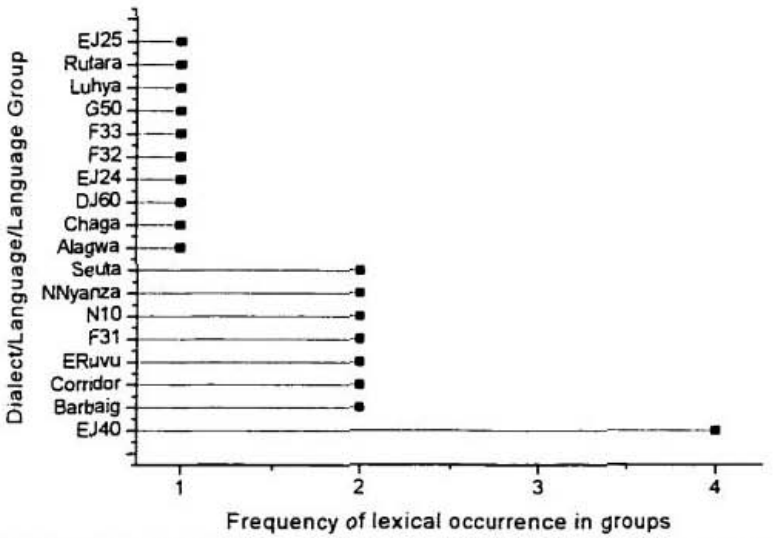


Figure 4.4 Areal frequencies between F21/F22b and other languages

come from languages like Hadza or Sandawe which seem to have been borrowers only, a situation which is not convincing.

The area is characterized by a convergence of various speech communities, contributing their vocabulary in turn to each other. Hadza and Sandawe should not be any different, unless there is a special reason why not.

4.2.1.2.4 KINyamweezi proper (Nz) (84%) (KINyanyeembe - KIKonooŋgo - SiGalagaanza)

These three dialects appear to form 'KINyamweezi proper', since KIDakama does not behave as closely to these three as expected. In addition, KINyamweezi proper is not

homogeneous. It has its internal sub-divisions too. When KɪNyamweezi is mentioned subsequently, only these three varieties are meant. The unique creations are three words, representing 12.5%, while the areal vocabulary accounts for 87.5%, or 21 words.

(148) Unique vocabulary (3 words)

dance vi **-saapa**
walk (take a) **-yʊʊmba** (F22b), not indicated in F22d) (cf F21c ŋwɪyʊʊmba 'shifting abscess, usually in gums, perhaps due to periodontitis':
weight **(β)ʊ-ti(i)mbu**, **βʊ-timbe**, (F22b βʊtiimbu) (cf F21c -tuuŋga matiimba 'fasten the tendons of an unruly cow or castrated bull by adding some weights like short logs in order to slow down its wild nature' < F22?)

(149) Areal vocabulary, derivation, morphological innovation and borrowing (21 words)

beads **waambo** F24 waambo; G60 -yambo; M20 uwaambo; M30 iɲambo, amambo; Rufiji lwambo
beat **-guma** Corridor ku-kuuma? borrowing, because the voicing of /g/ and change of PB *o to /u/ in F22 is surprising if the word is from PB *-kom- 'hit with a hammer'. No motivation is justified and this word cannot be inherited from Proto Bantu.
carry, convey **-soomba** F22b, F24a, F25 -soomba; Luhya xu-soomba; EJ24 ku-somba
elephant **n-zovu** (F22e **n-zoβu**) (F23a/b) DJ60, M10/M20 -nzovu: loan from either DJ60 or M10/M20, because PB *gu → /vu/ is not regular in KɪNyamweezi.
forget F22a, F22e **-laβɪɪla**, F22d **-laβɪɪla** (F23a, F23b kulaβɪɪla; F10 kulaβilila): unique creation, and then spread to those Zone F neighbours?
great **-hanya** (F22b; not in F22e): (cf G67 *mhaja* in ndombo mhaja 'elder brother') unique creation and a loan from F22 in G67?
hippopotamus **-tomoombo** (F22b, F10), (F22e -tomombo; F33 -toromondo (Ehret (p.c.)) (F22a not sure) i-tonoombo (F24a), n-tomoombo (F24b): [M10] -ntomombo: unique creation by F22, and F24, and M10 seem to have borrowed from F22. Rufiji-Ruvuma -tomondo; F24a displays an 'imperfect' transfer where an alveolar nasal has been used instead of the bilabial.
kidney **m-figo** (F22b, F10, F23a, F23b) M20, EJ24 -mfigo: < F23 or M20? (PB *p → f)
knee F22a **i-yʊŋgo**, F22e **i-yuŋgo** (not F22d), F24a i-yʊʊŋgo, F10 i-juuŋgo: DJ67 i-yuuŋgo (P21 liluŋgo) < PB*-dʊŋgo. This is borrowed from elsewhere, like F10, since in F22 *dʊ > /lʊ/.

kneel **-sukaamba** (F22b, F22a), **-sukamba** (F22e), tʊlaamba (F22d): M10 ukusukama: borrowing, with modifications: < M10? < PB *-kukam-? (cf G60 -fugamilo 'knee', PB *ku → su as in KiKiŋga)
lean (become), grow thin **-gaanda** (F22b) M30, G52, G60, N10, P10, P20 -ganda
lie on one's back **-laala kansaga** (not shown in F22d), F10 -laala kansaga, F24 -gona kansaga: Borrowing the second portion < F24?
return **-suβa** F22d **-sʊβa** (F23a, F23b, F23c kusuβa; F25 kʊsʊwa; F24b kʊtuuβa) EJ24, EJ25, F25 -suba; D25 subya: borrowing, < F24 kʊtuuβa, spread to F22, then to F23 because limited distribution apart from Rukereβe, CiJita, KiKwaaya and KɪLega, which might have borrowed from SiSuumbwa?
scorpion **ka-miina**, F22e (also F10, F23a, F23b) **ka-mina**:EJ23, EJ24, M10 ka-miina; [DJ60], F24 i-mina: < M10, and then through F22, spread to others?
six **mukaaga** (F22b, F24, F23a,b,c, F10): [DJ60], Rutara, North Nyanza, [EJ30], mukaaga: borrowing: < F23? < Rutara
spoil a child, pamper **-seneka** (not indicated in F22d): [M10] ukuseneka
squat **-sʊʊnzʊβala** (not given in F22d), F24 kʊsʊɲjʊβala: Thagicu -cʊɲjʊmara; G62 ukusuunzumala?; M10, M22, ukusunsumala; G33 kususumala?
stutter vi **-gugumɪla** (F25, F23b) EJ23, G321, G37, G52, P21, kugugumila; E66 ukugugumila; E74a kugugumia;, EJ17 kuguguma?; E64 -ɣuɣuma; DJ65, EJ16, kugugumiza; G23 kuɣuɣumiza; DJ67 ukugugumiza; G31 cigugumo?; G32 cigugumiza?; G64 kigugumizi: < KiSwahili?
sun, sunlight **lyʊʊβa** The absence of lɪɪmi 'sun, sunlight', as in F21 suggests that these two related languages did not travel the same path if such a central object as the 'sun' is different. and they are so adjacent
sweet, pleasant **-seemu**, F22d **-seeme** F23a,b -seeme (cf F21c -seemu 'sour') < F23?
walk **-ya** < -ya 'go' < *-gi- 'go' (other languages with -ya 'go': F24 kʊya; M10, M22, EJ43 ukuya): loan: < Zone M.
wall **igelele** F24a i-gelele, [F24] lʊ-gelele, M10 ulu-jelele < F24, especially F24b? If this is a loan from KɪKɪɪmbʊ south (F24b), then F24 is interesting, because it has lost (or some speakers have), and re-acquired it from F22: i-gelele F22 < F24

The other groups, languages or dialects which share one word with F22 are D25, DJ65, Rutara, North Nyanza, EJ16, E17, EJ30, EJ25, EJ34, EJ43, Thagicu, E64, E66, E74a, G23, G31, G32, G321, G33, G34, G37, G64, G67, N10, P10, P201, and P21. Although EJ16 and EJ17 belong to North Nyanza, they display those words as individual languages in which the word was not found in the group as a whole.

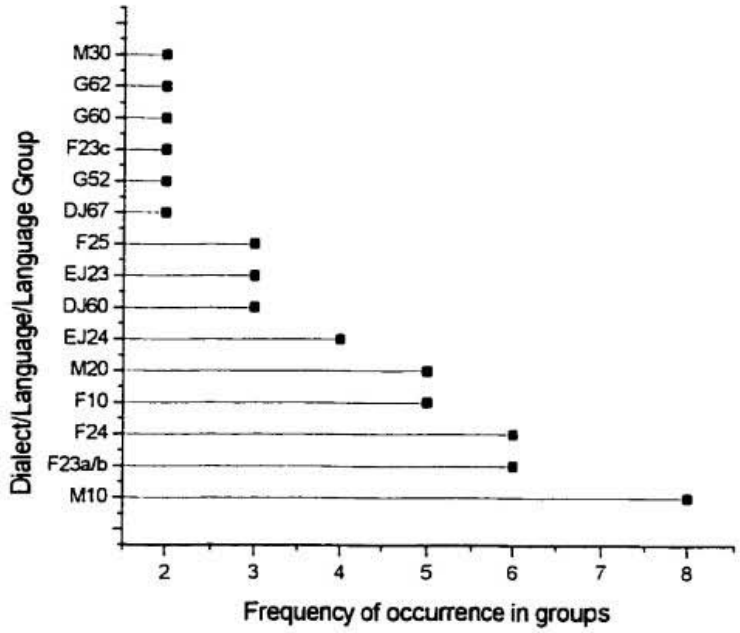


Figure 4.5 Areal frequencies between F22 (-F22b) and other languages

When KISukuma2 (F21 + F22b) and KINyamweezi (F22a/d/e) are compared, the sources of their defining vocabulary become strikingly different as *Table 4.21* shows. However, this difference is a matter of degree since it is measured by the total number of shared lexical innovations found in the sample used.

Table 4.21 Difference of unique vocabulary source between F21 and F22

Language group	Majority sources of areal vocabulary
F21 (KɪSukuma2 (with F22b))	(1) EJ40
F22 (KɪNyamweezi (without F22b))	(1) M10; (2) F23a/b, F24; 3 F10, M20

One factor which seems to play strongly here is geographical proximity. The majority of the sources tend to be adjacent or close enough, as in the case of KɪNyamweezi and the M10 languages such as iCiPimbwe (M11), KiLuŋgwa (M12), and CiFipa (M13), while EJ40 languages like iKiZanaki (EJ44) and its varieties like KiShaashi (EJ44l) are close enough to KɪSukuma.

4.2.1.2.5 SiSuumbwa (Sy) (84%) (SiSiloombo - SiYoombe)

Lexicostatistically, the shared vocabulary percentage between SiSiloombo and SiYoombe (SiSuumbwa) on the one hand, and those two with KiLooŋgo, on the other, is 65%, a rate which is not high enough for combining the two as one entity. The items shared are therefore entered separately as if F23c (KiLooŋgo) is not part of F23 (SiSuumbwa). Another important point to note here is that, while the JinaKɪɪya and GɪnaNtuzu node has only 14 unique vocabulary items, KɪSukuma (13 words), KɪSukuma2 (14 words), and KɪNyamweezi (24 words), SiSuumbwa, made up of SiSiloombo and SiYoombe among other dialects, has 74 words which need attention. These lexemes are different in significant ways from those in F21 and F22, as shown below. But their sheer quantity is also indicative of the fact that such

significant quantity as a marker of difference in vocabulary is a pointer to a different origin altogether.

(150) Unique vocabulary (11 words)

beard **ka-saku, lu-saku**:
crow n **m-baga** (F23a), **-βaaga** (F23b, F23c)
do **ku-gema**
door **mu-zigo** (F22d m(u)zigo) unique innovation?
embrace **ku-buumbilila** (F23c kubumbila):
hippopotamus **ŋ-guguma** (F23c eŋguguma):
hunger **bu-tamo** (F23a), **βu-tamo** (F23b):
jaw bone **mi-laambo**:
out (go), go away **ku-puuna**
walk **ku-tuumbagɪla**: innovation, < PB *-tambʊk-
what **biinde**

The unique words in F23a,b above are 11 out of the 74, or 15%, and the shared ones account for 85%. Such a small percentage of unique vocabulary in such closely-knit dialects as SiSiloombo and SiYoombe, compared to GɪnaNtuzu and JinaKɪɪya (29%), suggests an affiliation outside its own group to another, outside one where a relatively longer history with that group is indicated. Massive interference is also suggested.

(151) Areal vocabulary, derivation, morphological innovation and borrowing (63 words)

afraid (be) **kw-ooβaha** (F10 ku-ɣoβaha) EJ40 -oβaha: derivation < PB *-yoba 'fear'
arrow **m-wambi** (F23a), **m-wambɪ** (F23b): DJ60, M10, Rutara, omwambi; (G61 uwudambi?)
ask for **ku-saba** (F23a), **ku-saβa** (F23b, F23c):Rutara, EJ16, EJ25, EJ30, EJ40, -saba; -saβa; (EJ22 ku-ʃaba)

baboon, ape **ŋ-kobe** (F23a), **ŋ-koβe** (F23b), eeŋ-koβe (F23c):[Rutara] -ŋ-kobe; DJ60 , iŋ-kobe/iŋkoβe (RuTooro eŋkerebe 'baboon': is it the name of the RuKereβe language (EJ24) and its people (related to their (βaKereβe) totem? cf WaaMbuwe from mbuwe 'partridge/francolin', as a name given to KeeMbuwe (F34) by the KiiRaŋgi (F33) speakers because of the likelihood of descending from the same group before splitting?).
base of tree trunk **i-ziiŋga** (F23c i-ziiŋga) E54a, [M20] iʃi-siŋko; ici-siŋko; E62e itiŋko
beer, liquor **bu-sele** (F21c ma-sele, F22d βʊ-sele) EJ31 bu-sela; G32, G321, u-pele?; M20 i-pele? (cf EJ13 kaabwanjare '...marijuana'?, the connotation focusing on the effect of the liquor, 'like marijuana')
bladder **lu-hago** Rutara oru-hago/olu-hago; E16 aka-hago; DJ60, ulu-hago, uru-hago, aga-hago
branch of a tree **i-tabazi** (F23a), **i-taβazi** (F23b, F23c): (< EJ23 i-tabagi; (cf EJ13, EJ22, ei-taagi; EJ12, EJ21, DJ65 i-tagi; EJ11 ei-tagi; EJ14 ei-taji (loss of [b]?) (but Rutara normally has *gi >zi (Nurse 1979b): is it a loan from a common source which occurred when the languages with the word were still one, or is it a remnant of a proto Rutara word which was either borrowed by F23 (if F23 was not a member of Rutara), or was it retained in F23 as a member of Rutara because of an earlier split which was followed by relative isolation, suggesting that EJ11-EJ14 and EJ21-EJ22 lost the /g/ and then re-borrowed it from a common source before they split, the fact indicated by the failure of the expected process undergoing *gi>zi? That EJ23 became isolated again from the rest of EJ20 much earlier and retained the full form as it was borrowed? also cf *pole (thin)* **i-βazi/ma-βazi** (F23c lu-βazi) (cf 'branch' i-tabazi (F23a), i-taβazi (F23b, F23c): (cf EJ25a olubasi, E23 o-rubazi, M22 u-lwanzi,M14, M21 lu-wanzi))
broth, soup **mu-fwa** (F23c mu-fwa): EJ23 umufwa; DJ60 umufa
build (a house) **kw-oombeka** (F23c kw-oombeka) Rutara, E55 -kw-ombeka; EJ31 xuxw-ombexa; EJ31c -yombixa/-xwombaxa (cf EJ44 -yomboka; EJ441 okw-omboka; EJ402 kw-ombaka; EJ41 kw-umbaka; EJ25a -yumbaka?; EJ25b ok-umbaka?; EJ32 x-umbaka; EJ34 -yombaxa; and E46 -oboka; EJ45 ku-oβoka)
buttock(s) **i-heende** (cf EJ22 lu-hende [luende] 'anus', but enio/binio 'buttock(s)', and F21 ɲo 'vagina'[14], < PB *-nio 'anus'): borrowing? F23 adopting and adapting the word from

---

[14] Private parts and other taboo phenomena elicit all types of euphemisms and associations, favouring indirect references. For instance, while 'vagina' in most of Rutara is -mana, the same word except for vowel length in Western Highlands like KiRundi and KiHaŋgaza is -maana 'god, creator'. In Rutara, by association, god = creator = vagina. Is it < PB *-man- 'know'?, > "The knower', 'God', or is it from a different source? In Rutara -nio 'buttocks' suggests that, the regular word for 'vagina' PB *-yo was replaced by borrowing a word which associates 'vagina' with the creative powers of a god, and therefore became 'god', emana, although with time, even euphemisms become taboo. On the other hand, PB *-nio 'anus', < PB*-ni- 'defecate' seems more plausible, by derivation. In languages
(continued...)

EJ22 as an opaque euphemism in the recipient language?). Also cf D25 mwende 'calf of leg', suggesting that –heende is 'a protrusion')

calf of leg **m-fuundo** (F23c em-fuundo): DJ67, Rutara em-fuundo; M31 ama-kundo: semantic innovation: < PB *-kundo 'knot'?

chin **ka-saku** DJ60 aka-sakusaku; uru-sakusaku; aga-sagusagu: This may be one of the important keys to understanding the affiliation of F23a,b. Iconically, more complex is older, while less and simpler is younger, implying that the SiSuumbwa ka-saku is a reduction, indicating some earlier split from DJ60.

climb, ascend **ku-gegela** DJ67 uku-gegela (remnant from DJ60, or innovation in DJ67 or F23a,b and spread to F23?

count **kupeeta** (F23c ku-peeta) East Ruvu ku-peta [Corridor] uku-penda (borrowing: why not ku-heeta?)

crawl, creep **kw-aavuula**, (cf F23c kw-aazuula, F21c gw-aagula) (gu>vu vs gu > zu): M20, G51 ukw-avula; (cf EJ kw-azula, EJ23 kw-azura; EJ14 okw-ajura, EJ21 kw-ajula)

crocodile **n-saambi** (F23c en-saambi, F21a informant not sure)):[Rutara] ensambi, ensaambi/eɲʃambi

crown of head **lʊ-tooto** (F23a), **βw-ootooto** (F23b), (F23c lw-otooto): EJ40 orw-oototi; N14 lu-tʊtʊ; (F24 loo-looti?)

drizzle **lʊ-naanagala,** (F23b) **ma-naanagala,** (F23c lu-ɲaaɲagala, F10 ku-ɲaɣala (vi)): M10 -mvula ya ku-ɲagala (cf M31 akaɲaɲafula < nia -fula 'rain defecating') (haplology in F10 and M11/12?): borrowing, or genetic affiliation?

elephant **n-zovu**: DJ60, Corridor (cf F23c, EJ23, EJ24 en-zozu, < en-zogu < *-jogu) Morphological innovation when viewed from F21/F22 angle: gu > vu

forget **ku-laβɪla** (F10 ku-laβilila): [North Nyanza] kwerabira; EJ25 oku-labilwa, ku-rabirwa; N14 kulibalila?

fork, bifurcation **n-saaga, n-saga** (F23b); (F23c en-saga): EJ41 in-zago. In most of the comparative lists, the item was one of the least answered, showing its obscurity to most of the informants.

grain (of cereal) **ka-zumo** (F23a), **n-zuma, luz-uma** (F23b); (F23c lu-zuma): Rutara lu-zuma/oru-zuma, eɲ-juma, aka-juma

grandfather **gʊʊkʊ** (F23a), **guuku** (F23b): EJ23 guuku; EJ24 guku; E51 guuka; [EJ30] guka; [EJ40] ɣuka/guga; Borrowing? < F21 gʊʊkʊ because given away by the vowels?

hair **mu-sasɪ** (F23a), **mu-sasi** (F23b): [DJ62] umuʃatsi;

---

[14](...continued)
like KɪSukuma, PB*-nio 'anus' and PB*-yo 'female genitals' are difficult to distinguish because of their phonetic similarity. It is not clear whether *-nio and *-yo were indeed separate words, given the potential for semantic shift. In JinaKɪɪya 'anus' is lʊʃiindo, the origin of which seems obscure. Also compare Luβukusu kumsi (sg), kimisi (pl) 'vagina' vs oRuHaya omusino 'clitoris'

hare **nakami** (F23c ɲakami): Rutara ɲakami, akami; DJ61 bakame; (cf EJ13 orumi ('a huge hare'? <-kami?)
hate, detest **ku-gaya** (F23c ku-gaya): M12 uku-gaya
hide **-bisa** (F23a), **-βisa** (F23b): EJ17, EJ40, EJ25, D25, E46, P22, EJ31 -ku-bisa/-ku-βisa; -ko-βisa;, EJ17, P22 kubisa; EJ31 xuβiisa: borrowing from any of these languages which have both Dahl's Law and no glottalization. The expected form would be ku-hisa rather than ku-bisa or ku-βisa, just as 'to pass' is ku-hita rather than ku-bita.
hoe **m-fuka** (F23c emf-uka) Rutara em-fuka; EJ32 efuka
hump (of cow) **i-baaŋgo** (F23a), **i-βaaŋgo** (F23b): Rutara, EJ16, EJ17, i-baŋgo, ei-baŋgo
in front of **butoonzi** (F23a), **ku-βʊtoonzi** (F23b) (gi > zi) (cf F23c βʊtooŋgi)
jealous **i-buuba** (F23a), **i-βuβa** (F23b): EJ31 li-buba; DJ64, [Rutara] ei-buba; M10 i-βuβa; DJ65 i-fuha?; M20 uwu-zuwa?
king **mwaami** (F10 mwaami; F24 u-mwami[15]): DJ60 u-mwami; Luhya o-mwami
kneel **ku-sika sivi** (F23a), ku-sika sivwi (F23b): G31 ku-fika?; (cf EJ21 ku-teka; EJ22 ku-teeka): unique creation or areal vocabulary ?
knife mwaambi (F10 kaambi/twaambi): EJ16 a-kambe; M11 i-caambi; DJ66 in-tambi?
leak, ooze out **ku-vwa** (cf F23c ku-zwa): -dua > -vwa: DJ60 uku-va
lend borrow **ku-tiizya** (not used in F23a); F23c ku-tiiza): Rutara ku-tiiza; DJ60 gu-tiiza 'lend'/gu-tiira 'borrow' (cf DJ67 uku-liza; EJ22 ku-tiila 'borrow'; EJ25a oku-lisya)
leopard **ŋ-gwe**: E62f ŋ-gwe; North Rutara, [Luhya], DJ60, -ŋ-gwe. Although this lexeme is listed in Guthrie (1967/1971) as a Proto Bantu form, the presence of two proto-forms *-cʊbɪ and *-gʊe for the same entity 'leopard' suggests that the origin of languages after the first one (if ever there was one), is essentially multigenetic, on the one hand, or, it is an innovation after Proto Bantu spread over a wide area, on the other. But one lexeme may also mean only one type of leopard among the many species of the animal, and therefore the two items may not be referring to the same thing.
lost (get) **ku-βula** (F23c ku-bula): Rutara, EJ25, DJ61, EJ16,-ku-bula/-ku-bura; [EJ40] -bura/-βora; Thagicu kʊ-ʊra/ ku-ura: semantic innovation, < PB *-bʊd- 'lack' (cf PB *-bud- 'become plentiful or numerous')
love, want **ku-siima** (F23c ku-siima): EJ31c -siima; DJ66 ugu-ʃima
lung **ma-haaha** (F23a), **ma-haha** (F23b, F23c): DJ60 iri-haha/ama-haha; EJ43, Rutara -haha (ki-haa); EJ42 amaa; (<-papa as in N11 li-papa; N12 ma-papa; M24 i-papa) (cf G62, G63 ili-hafwa; G35 -hafwa; M23 ama-pafwa; G64 ma-pafwa; M201 u-pafwa; M22 e-pafwe/wa-pafwe, M21 -pafwe/ ma-pafwe; M14 -pafwe; P21 li-pawa; G65 ama-haswa?
migrate **ku-fuluuka** (F23a), **ku-fuluka** (F23b, F23c): Rutara ku-fuluka/ku-furuka (cf EJ17 kubulika)
monkey **ŋ-keende** (F23c eeŋ-keende) Rutara eŋ-keende; DJ64 iŋ-keende
moon **kw-eezi** (F23c kw-eezi) (ku- prefix): DJ60, Rutara -kw-eezi; EJ25 o-kw-esi
mountain **mu-gala**: G65 ikidu-gala

---

[15] From Nurse and Philippson's list, while our list had mutemi

mourning **naku**: EJ23 e-naku
night **bw-iile** (F23a), **w-iile** (F23b): [North Nyanza] o-bw-ire; (cf kilo < *-yid- 'get dark', from same root?): extension of meaning by derivation.
old **-laala/n-daala**: G23 m-daa 'old person', G321, G67, N11 -lala
parent **mu-βusi:** (BS ti > si): G63 mu-busi/ba-busi; EJ25, EJ34 omwi-busi <*-bʊt- 'bear (child, fruit)'
pig **m-punu** (not F23a) (F23c eem-punu): Rutara em-punu
porcupine **li-ɲogote** (F23a), **i-nogote** (F23b), e-ɲogote (F23c): [Rutara] eki-ɲogote, e-nogote; DJ60 iki-ɲogoto)
potato (sweet) **i-ziizi/ma-ziizi**: < Barbaig kasisa?
pour away **ku-seesa** (F23c ku-seesa): DJ60 ku-seesa/gu-seesa; Rutara ku-seesa; ku-ʃeeʃa)
quarrel vi **ku-soola**: F10, F22d ku-soola; EJ16 ku-sola or < F10?)
refuse, say no, deny **ku-kema**: G321 ku-kema
return **ku-suβa** (F23c ku-suβa): EJ24 ku-suba; EJ25 oku-suba; D25 -subya
river **mwiiga**: North Nyanza (EJ15 mugga (LuGanda: iC →CC); EJ16, 17 mwiga); [Rutara] o-mwiiga
salt **mwiinu** EJ31c -yinu[16]; [G60], P10 u-mwino/u-mwiɲo; G67, N10, mwiɲu
satiated (be), have enough to eat (or drink) **ku-haga** (not given in F23b), (F23c ku-haaga): [Rutara] oku-haaga; [DJ60] ukuhaga; gu-haga/gu-haaga
seven **musaamvu**: North Nyanza, EJ34 musamvu[17] (Cf F23c musaanzu; Rutara EJ24 musanzu; musaɲju; EJ22, [DJ60] muʃaaɲju) (cf EJ31 musafu) (An interesting case is M32 sebeni[18] < English 'seven')
sharp (be) **ku-ugiha** (F21a, F21c, F22a, F22b, F22c -ʊʊgɪha): EJ41 kw-ugiha; [EJ40] ok-ogeha/-oɣeha; E46 -ogeha; E51 -ʊhɪga, E53 ku-gia (cf E54b ku-giba; F24a kʊ-ʊgɪpa)

---

[16] While de Blois (1975) mentions that word, native speaker Evelyne Namaemba KiSembe (p.c. 17 September 2000) is not aware of such a word in the Luβukusu she speaks. It might be a dialectal variation or a loan, since table salt processed by modern methods is *cumbe* KiSwahili *cumvi*, while that made traditionally by extracting from plants is called *xumuɲu*. She also says that Luβukusu is changing rapidly.

[17] LuSaamia seems to use two forms, musamvu and citanu na ciβili. This suggests borrowing, which can be of either one, or even both.

[18] It is not clear what were the original CiNdali (M32) numerals and what happened to them after such a short contact with English, since Swilla (2000:304) does not explain, although she clearly says they were loans from the CiNdali spoken in Malawi (Malaaβi) where English was prestigious enough to replace even those morphemes considered relatively resistant to change by borrowing, although they are occasionally replaced (Swadesh 1950:157).

shiver **ku-zuguma** (F23c ku-zuguma, F21a kʊ-zuguma): [Rutara] ku-zuguma, kuzugumira; DJ66, DJ67 ukuzuguma; (any connection with DJ62 kugugumiza < -guguma?) (cf also EJ15 kujugumera (EJ12 kutukumira? (tu >zu? or gu >zu? Why not gu > vu as a regular reflex in F23?)
snail **mu-fweelo**: DJ60 iki-fwelo/igi-fweera/gifyeelo
spittle **ma-swaante**: Rutara ama-cwante/ebi-cwanta/ama-cwanta
spread, smear on **ku-siiga** (F23c ku-siiga, F21c gʊʃɪɪga): Rutara, EJ15, oku-siiga; DJ60 uku-siiga/ugu-siiga
squat **ku-sukumala** (F23c ku-sukumala): EJ23 ku-sukumala (cf EJ34 oxu-socomala)(cf 'squat in (149) above).
stick **ŋ-koni** (F23c eeŋ-koni): DJ60 iŋ-koni; Rutara eŋ-koni
stone **i-βaale** (F23c i-βaale): Rutara, [North Nyanza] ibaale; ei-baale/ ei-baare:; EJ31c -baale; EJ34 li-bale
take clothes off **kwaambʊla**:[DJ60] ukw-ambula/kw-iyambura; EJ16 okw-eyambula; EJ43b ok-ombora; [Seuta] ku-hambua; (EJ31 xu-xwiyabuula; EJ17 keeyambalya?)
thicket **i-sala**: EJ43 egesarara; EJ42 egesasara?
thigh of an animal si-taambo (F22b kʊ-taambo, F10 i-taamba/ma-taamba? F31a kɪ-taambo 'thigh of human being'): E55 ʊ-tambɪ?
today **βu-leelo** (prefix) innovation?
tortoise **fulwe** (F23a), fuulwe (F23b): DJ67 fulwe; DJ66 fugwe? innovation, <*-kudu
wean child **ku-syuusya** (F23a), ku-sʊʊsya (F23b): G61 uku-tusya?, [M20] uku-tuzyaa? G62 uku-suufya
which **ye tyaani**: M14 -cani;(cf M15, M22 icani 'what'); G33 ya kwahi? G36, G37 coni?
whistling **lu-guunzu** (F23a), lʊ-gʊʊnzo (F23b): D25 ka-gonzo
who **ende**:DJ60 inde (cf biinde 'what' in (150) and KiSwahili nani 'who' and nini 'what')

In Figure 4.6, not all languages are included. There are dialects, languages and language groups of one word shared with F23a/b, namely, Barbaig, E54a, E62E, P22, E62f, North Rutara, Luhya, Thagicu, G65, M14, G60, P10, N10, F22, E53, F21a, EJ15, Seuta, F22b, F31, G62, M31, G51, E74a, DJ62, M12, EJ32, DJ65, G31, M11, G23, N11, and G63.

From the qualitative results of SiSuumbwa in relation with other languages, some scenarios can be proposed in the determination of its origins and evolution, as a function of contact with

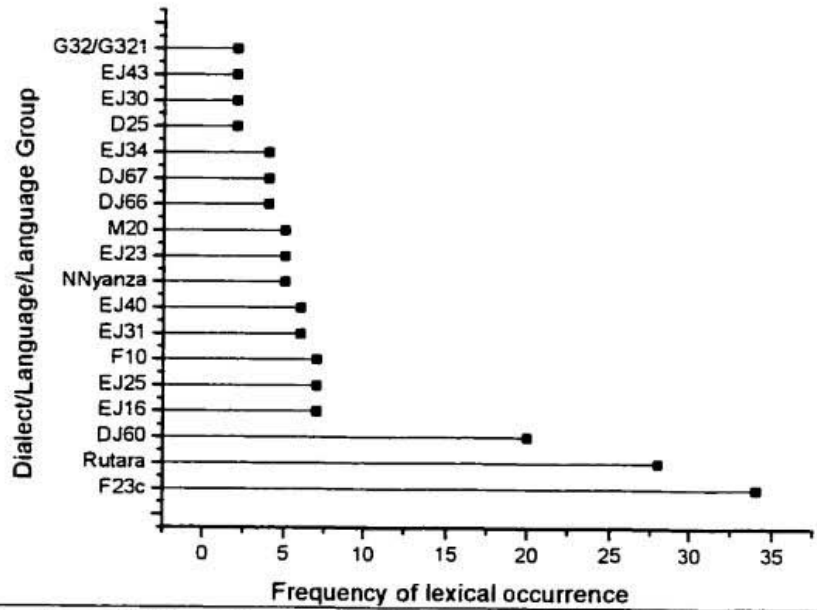


Figure 4.6 Areal frequencies between F23a/b and other languages

other speech communities. Some proposals are necessary because the results obtained from analyzing the vocabulary cannot reveal the "truth" embedded in them unless they are interpreted correctly.

While the historical events creating languages remain the same, with the enormous gaps in knowledge that we have, only flexible interpretations of what is available can approximate what really happened. With this caveat in mind, some three scenarios are considered.

Firstly, the monogenetic approach can be taken by assuming that the affiliation of SiSuumbwa to some of its neighbours sharing its vocabulary is genetic. To weed out the non-immediate contenders, a process of elimination can be applied using the numbers obtained in the results. EJ25 features as prominently as F10 and EJ16, indicating distant affiliation. The major dilemma here is the cut-off point and the criteria for judging whether a higher number of shared lexis necessarily means close genetic affiliation especially where all candidates are based on innovations.

The answer is a qualified affirmative because deep time depths may be shown by lower counts as more words are lost and replaced, while higher numbers may either indicate common history or only a more recent relationship based on heavy borrowing. Swadesh (1955:129) recognized the problem of such modifying factors in lexicostatistics. For instance, there may be heavy borrowing without any immediate genetic relationship, as in the case of English where the vocabulary from French is about 70%. Because all counts are based on innovations, all counts of similar innovations are supposed to be important, either as indicators of genetic relationship or borrowing. To isolate genetic affinity from similarity due to borrowing, the second scenario below can be invoked, so that loans remain loans only. When regular phonological, morphological and semantic overlaps occur between two or more languages, they normally point to a common history between them. Since lexical innovations alone are not an absolute measure of affiliation when no other facts are known, the higher numbers are reasonable predictors of genetic affinity when other criteria are considered to

support those numbers. In terms of numbers alone then, the best contenders as the genesis of SiSuumbwa remain Rutara and Western Highlands. As a hypothesis, only Rutara and Western Highlands (DJ60) can remain as possible origins of F23. With monogenesis, other approaches can be used to eliminate one of them so that only the most consistent group remains. Innovations on their own cannot do that. The phonology can help by picking the most salient and diagnostic innovation(s), as shown in *Table 4.22* below. One of the single most important pointers is the reflex *gu > vu in SiSuumbwa and *gu > zu / ju in Rutara, and which eliminates Rutara convincingly as a tree from which SiSuumbwa branched. This also helps classify KiLooŋgo with Rutara.

Table 4.22 Phonological affinity between Rutara, Suguti, Western Highlands, KiLooŋgo and SiSuumbwa from qualitative evidence

Innovation based on	Rutara (EJ21/22)	Rutara (EJ10, EJ23/24)	KiLooŋgo (F23c)	Suguti (EJ25)	Western Highlands (DJ60)	SiSuumbwa (F23a, F23b)
*tu	c	c	c	fu	pf	s
*du	ju	zu	zu	fu	vu	vu
*gu	ju	zu	zu	fu	vu	vu

In this first scenario, similarity and difference within one large group is displayed, depending on individual language history. The effect of contact with other languages might have resulted in heavy or light borrowing from them depending on the nature of the interaction with each group. Borrowing from other languages as a marker of linguistic interaction is a

phenomenon which is the norm than an exception, as Andersen (1989:11) comments with regard to the non-linguistic factors in linguistic descriptions. He notes that what are normally called non-linguistic factors to innovation are actually part of the linguistic process. Divorcing contact from regular linguistic realities can only be unfortunate. Many lexical or phonological sources in SiSuumbwa, for example, simply show how dense the interaction networks were as a linguistic fact.

The second scenario suggests that there was a core of F23 speakers, as a J language or dialect. Later, other speakers from other languages or dialects, especially from the vicinity (DJ, EJ, some F20, M10, M20), among other groups, contributed some items depending on the nature of their contact with F23. This means the other groups joined SiSuumbwa as semi-autonomous, co-ordinate groups which maintained their identity, but at the same time identified with their host, resulting in mixed codes. What the original status of F23 was remains the question, because it can be one of F21, F22, EJ10/20, DJ50/60, M10/20, or none. This scenario is plausible given the fact that speech communities are not normally hostile to each other, so that it is possible to acquire vocabulary from languages in contact. Between them, one contributes more dominantly than the others as a matter of degree only. The influence in such a situation becomes mutual, hence the shared features of innovation.

This scenario implies multigenesis in which a language is composed of several independent languages from the same family (Bantu) brought about by the cooperation of different people

speaking different languages and whose identity can only be revealed by a qualitative lexical analysis. It is the nature of a melting pot like North American French and English: sailor's English and français maritime. This is a situation which creates a unique mixed language characterized by co-ordinate linguistic features drawn from the contributors, the prominent features of one being a function of the perceived relative importance of the contributing language. With this interpretation, simple monogenesis is discounted in SiSuumbwa. Languages are spoken by people with particular histories, values and attitudes which impinge on their other social institutions like language. The more open their cultural systems, the more mixed their languages, and vice versa. SiSuumbwa illustrates that two or more speech communities can merge not in an automatic adversarial superior-inferior, conqueror-conquered relation, but as coordinate contributors to a whole. It is a language created by convergence rather than one with diverging dialects from a single proto language.

The third and final scenario is that of a common ancestor between F23 and the others so that DJ60, EJ10/20, EJ25, EJ40, M10 and M20, among others, are descended from the same proto language, the shared innovations being earlier forms in the proto language before they split, as a case of divergence.

These three scenarios are not impossible. As has been pointed out in Chapter 2, much is still unknown in these languages. But as a working hypothesis, SiSuumbwa is affiliated to DJ60 as the high frequencies and limited phonological facts show.

4.2.1.2.6 Qualitative evidence and patterns in KiSukuma, KiNyamweezi and SiSuumbwa

The linguistic picture from the shared innovations between F21, F22 and F23 indicates that, not only do F21 and F22 share different innovations between them, but also that they show the same difference from F23, as shown in *Table 4.23*. This supports the notion that they do not come from an immediate linguistic node, with similarity of high retention rates between F21 and F22 accelerated by inter-borrowing. This explains why only F23 has BS and consistent glottalization, only F21+F22b have DL and voiceless nasals, while F22 has neither, although traces of those processes are found in all 3 groups because of inter-borrowing.

Table 4.23 Difference of unique vocabulary sources between F21, F22 and F23

Language group	Majority sources of areal vocabulary
F21 (KiSukuma)	(1) EJ40
F21 + F22b (KiSukuma2, with F22b)	(1)M10/M20, Thagicu, EJ40
F22 (KiNyamweezi, without F22b)	(1) M10; (2) F23a/b, F24, (3) F10, M20
F23 (SiSuumbwa , without F23c)	(1) F23c, (2) DJ60, (3) Rutara

To illustrate this question of inter-borrowing, Table 4.23 shows that the source of M10/M20 vocabulary might be F22 through F22b, while the source of Rutara lexis in F23 might be F23c (KiLooŋgo), a Rutara language whose speakers have been adjacent to SiSuumbwa speech communities for an unknown number of years. The influence of KiLooŋgo on SiSuumbwa is indicated by the highest number of shared words (33 words) out of the total 76. The presence of E50 (Thagicu (Central Kenya)) vocabulary in F21+F22b indicates a genetic

affiliation which is also supported by the presence of DL and 7V in Thagicu, as in F21+F22b. This possibility is taken up again in **4.3**.

4.2.1.2.7 Ul (83%) (KɒaUshoola - KɒɪLaamba C)

According to the vocabulary items available to the author, the 13 lexemes shown in (152) are unique to F31a/b at a percentage of 42%. This suggests a long common history since the unique count is one of the highest, if not the highest, in all cases of unique creations within dialects. The rest are shared by other groups, representing 58%. Such shared items suggest interaction of either F31a/b speakers moving to other places and then coming back to F31, or those of other languages coming into contact with F31 speech communities. Another scenario is bidirectional movement of speakers as a sign of mutual linguistic contribution and enrichment.

(152) Unique vocabulary (13 words)

axe **m-poopo**
beer **n-tʊlʊ** (cf F24 ntɪlɪ)
day **lʊ-toondo** (cf F21c ntoondo 'tomorrow')
drink **kʊ-kopa**
hair **lʊ-tuumbɪ**
press out (oil, seeds, sugar cane) **kʊ-kasima**
push **kʊ-gʊma**
salt **mʊ-leeŋge**, F31b **mul-eeŋge** (F24b mu-leeŋge) (cf G35 m-kere): where F24b suggests borrowing from F31a/b because of the occurrence in one dialect only, while the vowel /u/ in the prefix of F24b is also suspect, given F24's high rate of accurate reflexes from Proto-Bantu
shiver **kʊ-kɪkɪma** iconic creation as a group's way of perceiving shivering like animal sounds in various cultures, which, though come from the same animals, are perceived differently by different people)
sister **mu-gʊli**, F31b **mu-guli** (cf G42d ki-goli 'young girl')

stutter **kʊ-ʃekema**, F31b **kʊ-sekema**
today **na n-teende** (cf G52 na-lelo, with prefix na- 'with, of' as in F31a, F31b: any relation?)
woman **mʊ-sʊʊŋgʊ/ a-sʊʊŋgʊ**

(153) Areal vocabulary, derivation, morphological innovation and borrowing (18 words)

brother, relative **mʊntʊwa,** by derivation < PB -ntʊ 'person'?
hand (left) **ŋ-kɪgɪ**, F31b **kʊŋ-kɪgɪ** (F24 mu-kigi[19]): N11 kumaŋ-gigi; G60 ku-ŋigi/-ɲigi/-ŋigi/-ɲ̊igi; [G50] ku-ʃigi/m-kii; P21 kuɲ-ciji;(cf [P10] kuŋ-kɪya/-kiɣa
jaw (bone) **n-zagasa**, F31b **n-zakasa** (F34 ŋ-kaasa)
prominent (be), put out **kʊ-punɪla** dissimilation of two consecutive syllables with bilabial onsets: < *-pum- 'come/go out or away'
puff adder **kɪ-sʊʊpa**, F31b **kɪn-sʊʊpa** E53 ki-ua? (In Meru Imenti, *p > Ø, but not s > Ø (Nurse 1979b), making the word a possible match).
quench, extinguish **kʊ-dibya** (< –dimya < *-dim- 'extinguish', (but why in KɪnɪLaamba should this be: *m → b and *di →di? Is it morphological innovation?
sharp (be) **kw-iyʊʊpɪka**, F31b **kʊ-yʊpɪka** E51 -ʊhɪga (< -yʊkɪpa, metathesis)
sit **kʊ-kikalaansa**, F31b **kʊ-kɪkalaansa** EJ42 go-ikaransa (cf E54b gu-ikaranθi; E54a gu-karanθi; E52 gw-ɪkara nθi; E55 kw-ɪkala nθɪ; E51 i-karaθɪ, E53 ku-kara nθɪ; M25 a-xale pansi; G23 ku-ikaa ʃi; G36 kukala hasi; G52 kw-ikala pasɪ; G66 ku-kala pasi; M22 ukw-ikala pansi; M24 ku-hala pasi (< *-yikala 'stay' + *pa 'at' + *-cɪ 'earth/land') (note: Standard KiSwahili (G42d) -keti < Northern KiSwahili -keṯi < -kala iṯi 'sit here (on earth)'
sore **ŋ-kooŋko** F24 ŋ-xoŋxo[20]; G60 iki-kooŋo/-ŋoŋgo/ŋoŋo/-koŋ̊o (cf EJ31c -goɲjo?; EJ34 e-koɲjo)
spoil **kʊyonoona** (F24 -noona[21]): [J60] -kw-onoonekala/-kw-onoona; EJ17 kw-onona; M10 uko-onona;

---

[19] This word appears in Nurse and Philippson's 1972 list, suggesting idiolect variation, depending most probably on the bilingualism of the informant, his/her area of residence and the probability of borrowing.

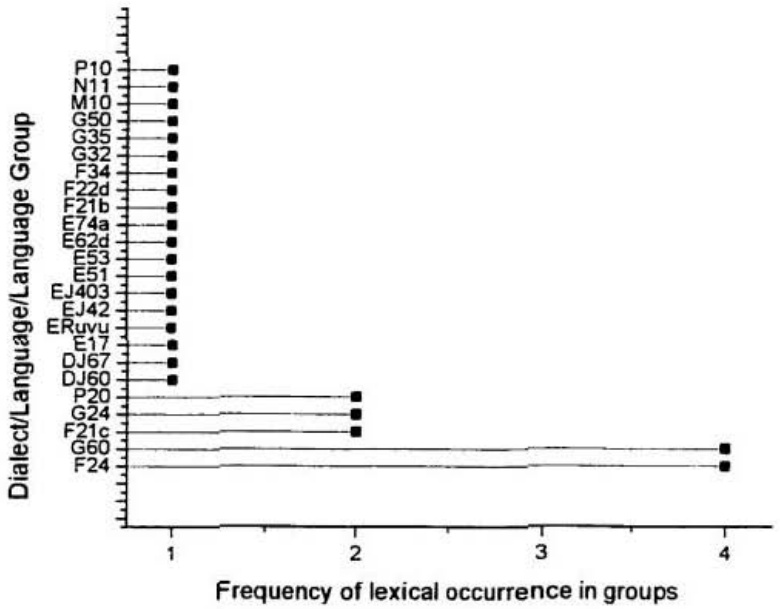
[20] Recorded in Nurse and Philippson's CBOLD list, and the speaker from KɪKɪɪmbʊ North (F24a) responded by giving *kiloonda* and *iŋxoŋxo*, while two of the F24b respondents gave *kiloonda* only.

[21] From Nurse and Philippson's list, while our list was kʊpokulya according to the translation in KiSwahili, which was *kupofua* 'to blind' from 'spoil, blind' in which the KiSwahili rendering does not include 'spoiling' as such because it is general, while to 'blind' is a specific form of spoiling.

spot, speckle **-dyoa/ma-doa** (focus on the singular form especially where palatalization is common[22]) (cf languages with non-palatalized forms: G24 -doa; G32 doa/ma-doa; E62d -dowa/ma-dowa; EJ403 ri-dowa
stranger, visitor, guest **mu-geenda** [G60] umu-geendzi;(< PB *-geend- 'go' 'the one who goes (or passes, does not stay)') (cf EJ34 omulu-kendwa; G35 u-menza?))
suffer, bear patiently **ku-gigimɪɪlya**, F31b **kʊ-kɪgigimɪɪlya** (cf F21c gw-gimɪlɪja 'endure')
sweat (n) **-yɪla** (cf F21c gʊʊyɪla 'to sweat')
thigh (human, animal) **kɪɪga** G24a kiga 'human thigh'; [P20] ciiga/ ciya/sija 'human/animal thigh'
tomato **n-tole** (F21b i-tole/ma-tole; F22d mu-tole/ma-tole) DJ67 iβi-tole (vya mbwibwi)
tree **kyota/ma-kota** (widespread in east Africa, see Nurse 1979b) (ikota (Class 5) → kyota (regular palatalization in KɪnɪLaamba)) (cf βʊ-gota 'medicine' in (147) in KɪSukuma/KɪDakama as an areal feature which can also be observed in *Table 4.9*).
up, above **kyaaʃna**, F31b **kyaania** (F24 kʊ-caaʃna) G60 ku-kyaʃna/ku-caaʃna/ ku-ʃaʃna; E74a ku-caʃna; [East Ruvu] ucaʃna/ucaɲa/ucana? (cf M20, M30 ku-mwaʃna/pa-mwaʃna.

From Figure 4.7, F24 and G60 sharing 4 words each with F31a/b suggests a certain historical relationship, of either contact and mutual borrowing only, or genetic affiliation. On the other hand, as in other cases above, the presence of F24, G60 and all the other languages' vocabulary in F31a,b might also suggest cross-immigration into and from F31 by speakers of other languages and their continued use of some items from their language. This is often the case, especially at the edges of different speech communities.

[22] Palatalization in KɪnɪLaamba occurs before class 5 (di/dɪ or li/lɪ) and 8 (bi/bɪ); in many tense markers like -i- present, -ki- future, -ile perfect (Nurse 1979b:31).



■ Figure 4.7 Areal frequencies between F31a/b and other languages

4.2.1.2.8 KɪKɪɒmbʊ (Km) (82%) (KɪKɪɒmbʊ North and KɪKɪɒmbʊ South)

(154) Unique vocabulary (13 words)

blood **caaji** (F24b) unique creation as a definer of F24.
door **ŋ-kɪlɪ** (F24b) (cf Proto-Kalenjin kʊrk 'door'?): unique creation or borrowing?
grass **ma-saaɲje** (F24a), **i-saaɲjɪ** (F24b)
gruel, light porridge **m-paapʊ**
hoe **i-silɪ** (F24a), **i-siβɪ** (F24b)
hunt **kʊ-guuβa** (F24b) (**kʊ-βeenda** (F22a, F22e -βeenda, found in F24a as inherited from PB as in E62e -binda, G37 -winda, G42d -winda, G52, P15 ku-vinda)
leaf (of tree) **i-titi/ma-titi** (isaaɲjɪ/masaanjɪ F24b)
navel **i-wuumbu** (F24a), piwuumbu (F24b) (cf F21c jiβuumbu 'pubic area')
pregnancy **mii-tuŋgo** (F24b) unique creation, as a euphemism, literally meaning 'something which is wrapped, and therefore fastened safely inside', < *-tuŋg- 'tie up'
search for **kʊ-pʊʊga** (F24a), **kʊ-puuga** (F24b)

sound, cry **idoolo** (F24b) unique creation, or from specific sound rather than generic.
spit **kʊ-tya matye**
stutter **kʊ-tamaantama**

The 13 words above, or 33%, are unique to KIKIImbʊ, a high percentage which indicates that F24 and its dialects has a long history of internal cohesion. The areal vocabulary, at 67%, shows the effect of neighbouring languages. The influence of KInyamweezi is obvious from Figure 4.8 below.

(155) Areal vocabulary, derivation, morphological innovation and borrowing (26 words)

banana **-dooke** (F21, F22 -dooke) P15 ndoki < F22 < 21 (because of DL) < EJ? due to proximity
bark of a tree **i-pata** (cf F32 i-bada/ma-bada (F32a, c), I-baada F32b)) < Barbaig badacanda geta (geta 'tree') < Proto-Southern Nilotic *pɛrtɛt 'bark (of tree)' (Rottland 1989:221)? or did Barbaig get the word from F24, and F32 got it from Barbaig?
blood **mu-gazi** (F24a) F22a,b,d,e mu-gazi; F23a,b ma-gazi; N12 ŋ-gazi: borrowing < F23a,b because F22 has no inherited BS where *d > /l/; (cf **caaji** (F24b))
bowstring **ŋ-gʊsa** (cf ŋgʊsa, a proper name in F21): M21 lu-kusa lwa wulapwa; M24 aha-kusa (spelling error from ama-kusa?); EJ23 omu-guha gubuta: s > h?
climb **kʊ-taanta** (cf F22d, F25 kʊ-taanda; F10 ku-taanda): unique creation, or is it only one type or way of climbing, an innovation which is common in all verbs of motion?
dance (vi) kw-iigeya (cf F32a i-ɣeya; F32b w-IIyeya; F32c g-iyeeya 'imitate': borrowing: < F32?
deny **kʊ-siita** (F33 kʊ-siita; F34 o-siita)M31 ku-sita; (cf G61 usiiti 'denial') (cf P25 kw-ita?) < Proto-Southern Nilotic *ʀɛɛt[23] 'deny, refuse'?
grind coarsely **kʊ-balaaga** (F24a), **kʊ-balaga** (F24b) EJ25a oku-baraga; EJ41 ku-baraga; G61 ku-balaŋga; EJ22 ku-baraŋga; G62 uku-balaasa; G63 ku-baladzula; G34 ku-balaza; E54b ku-bararIa; P14 ku-balahya; (cf E61 i-baraŋgata < PB *-pad 'scrape' , e.g. as in M21 uku-palala? (cf G42d ku-paaza): borrowing: < G60?
grow (of plants) vi **kʊ-leemba** (F25 kʊl-eemba): unique innovation by metathesis, as an idiosyncratic development: < kʊlemba < kʊlema < kʊmela < PB *-med- 'grow, sprout'?

---

[23] 'R' is a consonant which stands for an approximation without full feature specifications, and therefore can be flexible (See Rottland 1989:220)

hide **kʊ-sweexa** (F24b), **kʊ-βisa** (F24a). The two words in the two dialects might be from two different sources, or from one source because of their irregular shape in KIKIImbʊ where there is no /l/ deletion nor *p > β as observed in the respective words: North Nyanza ku-kweka (cf DJ66 ugu-seleka; DJ67 uku-seleka; Rutara ku-seleka/ ku-sereka; ku-ʃeleka/oku-ʃereka; and **kʊ-βisa**: D25, E46, EJ31, EJ40, EJ25, F21, F22 -βisa/-bisa; F23 -ibisa (reflexive): borrowing: < Rutara and F21/22 for the two words respectively?

in front of **kʊβʊ-looŋgolo** (F24a), **kʊ-looŋgolo** (F24b) G60 kuwu-loŋgolo, pawulooŋgolo; East Ruvu, N10 ku-loŋgolo, ku uloŋgozi, paloŋgolo; [M20] kwi-loŋgolela; Seuta ku-loŋgole. See also G50, P15 kuu-loŋgolu) (cf βʊ-tooŋgi 'in front of' in (145) KISukuma)

jawbone **ma-zakʊla** (F24a) (F22e i-zakula/ma-zakula): [M10] i-zagula/ama-zagula: unique creation, and a loan in F22e and M10 because of that phonological giveaway /u/ in F22e instead of /ʊ/?

journey **mu-sIIʃjo** (24a lʊgeendo) (F31a, F31b mu-sIInzo; F31c lʊ-sIInzo/n-sIInzo; F32 mʊ-heeʃjo/mu-hiiʃjo): unique creation, and borrowing in F31 and F32 < F24?

maize **i-gaagwe/ma-gaagwe** M20 iŋ-gagu, amaŋ-gagu/amagagu:

mother **maayI** (F25 ʊ-maayi) E62d, [EJ40], G35, G61, M10, M20, [M30] EJ25 , u-mayi/maji; EJ31 mayii;

mushroom **wiipwa** (F24a), **wIIpwa** (F24b) [G60] u-wiipa

out (go), go away **kʊ-fuma** borrowing: < F22?

potato **-kafu** (F24a) (F22 -kafu) borrowing: < F22?

sew **kʊ-suma** F22, [F21] [F23] [Seuta], G321,Corridor -suma: borrowing: < Zone M and spread to F21/F22,<PB *-tum-, as in F31 -tuma? (cf KiKiŋga: PB tu → su (Nurse 1979b:459; also Seuta: KiKiŋga as nearest source?))

sniff, smell out **kʊ-tuca** (F24a), **kʊ-tuuca** (F24b) : borrowing: < Alagwa tsuʔut- 'to sniff' (See Ehret 1980:199)

spider **n-suma/i-suma βʊ-taanta** literally 'weaver of webs' (cf DJ67 tanda; G35 tandabui; M21 etandawulwe): borrowing, from a language with BS, because KIKIImbʊ is expected to have -tuma instead of -suma < PB *-tum- 'sew'. Name is derived from the spider's activity.

take leave of **kʊ-daahya** (F24a), kʊ-daaya (F24b) (F22 -daahya): borrowing: < F22, with DL. The regular reflex of F24 is like in F23 or F10 ku-taahya. In all the more than 100 varieties available for that word, only F22 has that word, and it is not well-formed in F24. In F21 it has connotations of 'bidding farewell' to a medical apprentice after graduation so as to practise on her/his own.

walk **kʊ-ya** (F22a, F22d, F22e): M11 kuya ulwa mulu; EJ43b ukuya magoro: borrowing < F22, by M11, and perhaps EJ43b? < PB *-gi- 'go' (cf -ya 'go' in (149) in KINyamweezi proper (F22a, F22d, F22e)).

wet (get) **kʊ-saapa** EJ22 ku-ʃaaba, Barabaig ʃaba

word, affair **mpola** [M10] impola unique creation, then loan to M11/12? (cf KISukuma (F21) greetings: ʊlI m̊ola 'Are you well?' Literally 'Are you a word?' that is, 'Do you have any word?' = 'Are you well?')

zebra **n-seŋgele** G63 i-seeŋgele, G61 n-seɲjele, M24 in-seɲjele: borrowing: < Barbaig siŋgiyed 'zebra')

The role of geographical proximity in lexical similarity is displayed well in this case of

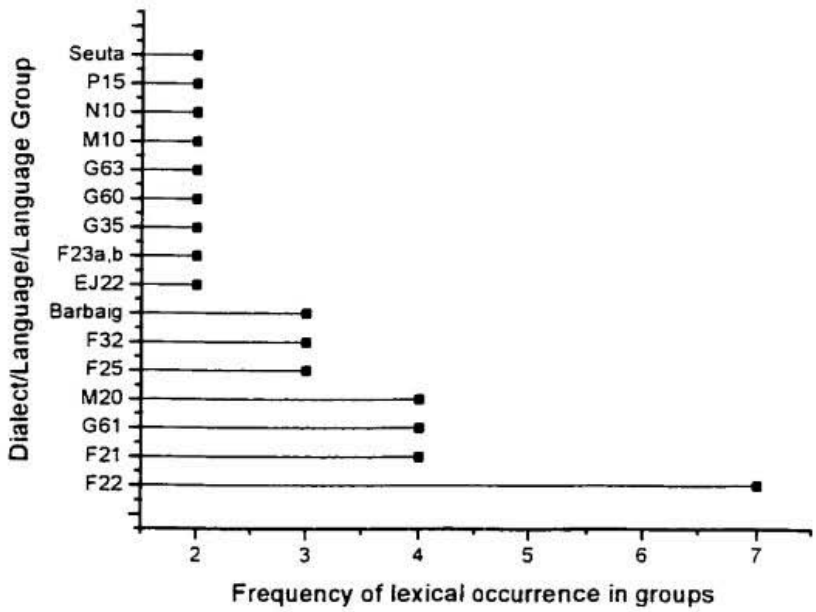


Figure 4.8 Areal frequencies between F24 and other languages

KIKIImbʊ and its neighbours like KINyamweezi, Corridor-Nyiha languages (M20) on the one hand, and by the Southern Highlands languages like eSiSaaŋgu (G61), and others, on the other. The farther away a language, the more unlikely the occurrence of shared items, and if such occur, then it suggests contact in the past or genetic affiliation. The F22 items are presumed to be mainly borrowed, because they skew the regular KIKIImbʊ reflexes. So far there is no known pressure of G60 over F24. The similarity therefore points to possible

contact in the past and present, involving constant interaction over a long period of time. This is especially true because many languages share vocabulary with F24, including the following dialects and groups, which share one word each with KIKIImbʊ: N12, EJ23, G34, E54b, Rutara, East Ruvu, F22e, F31, EJ25, EJ31, Corridor, F22d, F10, F33, F34, M31, EJ25a, EJ41, P14, G50, EJ40, E62d, M30, G321, and Alagwa.

4.2.1.2.9 SN (81%) (KISukuma2 - KINyamweezi)

Out of the 21 words 5, or 24%, are unique to KISukuma2 and KINyamweezi. This indicates a closeness which is significant historically, suggesting a genetic affiliation. The remaining 16, or 76% of the total, occur in other languages as well, although their forms may not be necessarily identical with those found in KISukuma2 and KINyamweezi (SN).

(156) Unique vocabulary (5 words)

affair, word **m̊ayo** (F21) (< mu-hayo) , **mu-hayo** (F22)
chase away **-peeja** (F21); **-peezya** (F22) < -peela 'run', -peeja/-peezya 'make run' (*run* **-peela** (F23 kupela[24], not given in F22d)
escape **-pIla** (not given in F22d)
search for **-kooβa** (F23a, F23b -kooβa), a loan in F23.
tick **ŋ̊uundya** (F21), **ŋ-kuundya** (F22) (F22d lIŋ-kupa (not related)

(157) Areal vocabulary, derivation, morphological innovation and borrowing (16 words)

baboon **ŋ-gʊkʊ**; **ŋg-uku** (F22e); **ŋ-kʊkʊ** (F22d) (F22a not sure) M11 ama-kuku; [EJ30] iŋguke; DJ62, [EJ25] iŋ-guge; EJ40 eŋ-goge/eŋ-ɣuɣe E46 ŋ-goge (cf EJ32 iŋ-guci)

[24] Only in Nurse and Philippson's list, our list has kw-iiluka/kw-iilʊka 'run'

bark of tree **i-gʊla**; **i-gʊʊla** (F21a); **ɪ-gʊla** (F21c); i-gula (F23) (F21b word not mentioned) (F23 < SN because in F23a,b gu > vu and F23c gu > zu); [DJ60] iki-gula; Corridor -gula/-cuula/iʃi-zula/ivi-zula; G64 i-cula; EJ24 e-cula/el-yula (cf N14, P14 li-jola/ma-jola)
brother-in-law, sister-in-law **ŋ-kweela** (F21) **mu-kweela** (F22): innovation by derivation <*-kʊed 'marry, copulate' Literally, 'the one who was married,' or 'the one who copulates' to contrast *-kʊe 'relative by marriage' restricted to in-laws
dust, cloud of dust **lʊ-βuuβu**, (**lʊ-βʊʊβʊ** F22a) (F23a lu-buubu; F23b, F24a lʊ-βuuβu; F23c lu-βuuβu) EJ34 o-lufu; North Nyanza em-fufu?: Derivation PB *-bu 'ashes'
full (become) **-okala** (F23a, F23b -okala) loan to F23 because it is limited to F23 only.
get, obtain **-paandɪka** (F23 -paandika, F22a not certain) derivation from PB *-pat- 'hold', loan to F23 because regular process in F23 is *pa > ha
hump of cow **lʊ-guku** (not mentioned in F22a, F22b) (F31c lʊ-kuku; F32, F34 -kuku; Thagicu -guku/-θuku; E74a i-fufu; DJ60 i-pfupfu/i-ɸuɸu) borrowing: < Barbaig hukta < Proto Kalenjin *yʊʊk (Rottland 1989), or < Ehret (1971:96) claims the source is Proto Southern Nilotic *yuuk (*yu:k) 'cow's hump'?
listen **-degeleka** (F23b -degeleka; not mentioned in F22d) M11 uku-tegeleka; EJ25 -tegeresya; EJ40 -tegerera; E46 -tegerya; (cf M20 uku-teyelezya; EJ31c -regidididia 'listen to' (de Blois (1975); DJ66 ugu-tega amatwi 'to snare with the ears'; DJ67 ukukutegeleza?; East Ruvu ku-tegeleza; G23 ku-teɣeeza/ku-geeza; EJ34 -tekeresa; F24a -tekelezya, F24b -tegelelya; F33 kʊ-teerera; F34 o-teererera < PB *-teg- 'trap'? innovation by extension of meaning
resemble very closely **-ikola** (F23a, F23b kw-iikola; F24a,b kw-iixola) Corridor uku-kolana (cf F32a gw-iixwere; F32b g-iixwa; F32c g-ixwa, where *d or *l is sometimes lost)
seize **-diima** (F24a -diima) (cf F25, Corridor ku-lema; (EJ22 ku-zimatila? P12 ku-limba?) EJ34 oxu-dira (misspelling?)
speak **-yoomba** (not shown in F21b) (F23a, F23b ku-yoomba) EJ16, EJ24 ku-yomba; EJ25 -yomba; EJ34 oxu-yomba (cf EJ17 kw-omba 'quarrel'; G52 ku-womba; <-gomba as in, Seuta, [East Ruvu] -gomba?; (-gomba-na (reciprocal as in G24, G31, G52 -gombana) (cf mbegu > mbɪyʊ: is it the same process of PB *g loss which in SN is irregular, found in a few words like these two? *g-loss in non-high contexts is regular in E60/E74, some Sabaki, F33, F32, some Thagicu (see Nurse 1979b:462). Source of -yoomba therefore may be one of these languages/groups)
squeeze (milk), milk **-ʃeema** (F21), **-syeema** (F22a, F22e), (F22d has -kama - not related) (F24a -ʃeema, -syeema[25]); F31a -ʃeema (cf EJ32 xuʃela (misspelling?)
tomcat (half-wild) **kɪɪmbʊlʊ** (F22d **sɪɪmbʊlʊ**) (not indicated in F21b, F22b and F22a)(F23a siimbuulu; F23b simbʊʊlʊ; F24 kɪɪmbʊlʊ) EJ441 kembulu
war **βʊ-lʊgʊ** (F22a, F22e **wʊ-lʊgʊ**, not shown in F22d) (F24 wʊ-lʊgʊ) G61 uwu-lugu; M20 -ugu; G66 lilugu; (Proto Kalenjin *luk 'war, raid' (Rottland 1989; or < Proto Southern Nilotic *luk 'raid', Ehret 1971).

---

[25] In Nurse and Philippson's list

white **-aape** (not given in F22d) (F10, F24a -aape; F23a, F23b -epe) Innovation using the intensifier instead of the lexeme: < *-yelu pe, where *pe* is an intensifier. KiSwahili (G42d retained both, with regular loss of *l: -eupe. (See Nurse and Hinnebusch 1993:290, 583-4) *wind* **lʊ-yaga**, **ɲaga** (< mu-yaga as in F22, F23) (F10 mu-saɣa) Rutara, EJ25 omu-yaga; DJ60 umu-yaga: Borrowing: < DJ/EJ mu-yaga?

Compared to the unique creations, shared vocabulary due to borrowing or contact generally

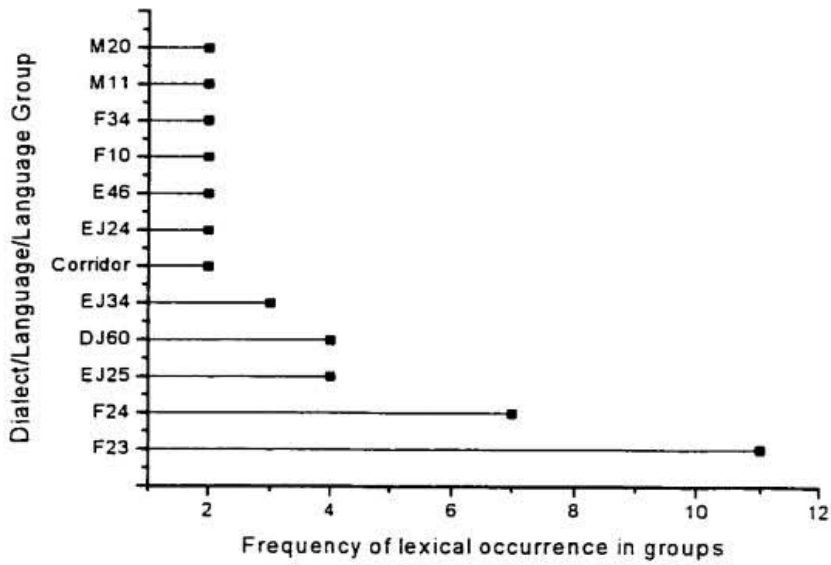


Figure 4.9 Areal frequencies between SN and other languages

predominates at 16 words out of the 22 total. Such skewed results in favour of external sources of vocabulary support in part the idea that the sources of KɪSukuma2/ KɪNyamweezi are many and varied, as Batibo (1992b) points out for KɪSukuma. The other languages or groups sharing one word each with SN are EJ30, DJ62, EJ40, G64, EJ16, G61, G66, N14, P14, F31c, G32, Thagicu, E74a, EJ17, F31a, Proto Southern Nilotic (PSN), Barbaig, DJ66,

DJ67, East Ruvu, G23, F33, F25, EJ22, P12, G52, EJ441 and Rutara. Those sharing two or more words are represented in Figure 4.9.

4.2.1.2.10 Ar (80%) (GiAhi - GɪRwana)

Only 7 words are shared by these two dialects, indicating that their history as separate dialects has not been a long one. Out of those, 3 (43%) are unique, supporting the idea of a short period of separation. On the other hand, it is difficult to predict whether a longer list of words would make a difference in the percentage of unique vocabulary. As it stands, the distribution between unique and areal vocabulary is almost equal, 3 by 4 words respectively.

(158) Unique vocabulary (3 words)

arrow **i-Ruumbo** (cf F21c ɪkuumbo 'arrow shaft')
listen **-Raaya** (F32a), **-taraya** (F32b)
mushroom **mpoRa/ma-mpora**

(159) Areal vocabulary, derivation, morphological innovation and borrowing (4 words)

branch (tree) **i-saaɲja** M14 lu-sansa (cf EJ31c -sagia; EJ34 esaga) < PB *-canj- 'spread': derivation and extension of meaning (not from PB *-canju 'branch')
chase (away) **-jʊɲca** (F32a), **-juɲca** (F32b) (cfG64 xu-ɲica; EJ11 kw-iruca; E51 -ɲukia; E54a ku-ruŋgia; E55 kʊ-lʊŋgya)
climb, ascend **-nantɪa** (cf F24 -nanta[26] 'climb')
hunt **ʊseempa** (cf G33, G35, P11 ku-pelemba)

[26] From Nurse and Philippson's list.

4.2.1.2.11 KɒɪLaamba Lm (78%) (KɒiaUshoola - KɒɪLaamba (' - KɒɪHaanzu)

Of the 25 words, 10 or 40%, are unique to **KɪnɪLaamba (F31)**. The rest occur in other neighbouring languages, although there are few cases like M30 languages which are not adjacent. A high number of unique words from the total number of innovations indicates a historically valid and close-knit linguistic group, especially when it is larger than a language, incorporating several dialects. When the majority of the innovations is composed of shared words, the claim of historically based grouping becomes less certain.

(160) Unique vocabulary (10 words)

be, become **kʊ-tula** (F31a, F31b), **kʊ-tʊla** (F31c)(cf G23 ku-ituka?, G51, G54b gʊ-tuɪka?)
get, obtain **kw-iligia** (F31a), kʊ-ligya (F31b), kʊ-lija (F31c)
leaf (of tree) **lʊka** (not shown in F31c)
lean, bend (down) **kʊ-tuna** (cf F21 c -tuna 'bend the knees and lower body vertically, especially for women, as a sign of respect'):
maize **m-pʊkɪle** (F31a) **-pʊkɪle** (F31b), **kim-pʊkɪle** (F31c)
mourning **sʊka** (not mentioned in F31c)
search for **kʊ-duuma** (F31a, F31b), **kʊ-duma** (F31c)
spear **n-dilima**
twin **miintʊtɪ** (F31a, F31c), **mɪntyʊtɪ** (F31b)
wife **mʊ-sʊʊŋgʊ** (F31a, F31b), **mu-sʊʊŋgʊ** (F31c) (cf P23 m-jaŋgu/ɲ-jaŋgu?

The following 15 words, though they occur in other zones outside Zone F, are peculiar to KɪnɪLaamba only within Zone F, representing 60% of the 25 words identified. Where a Zone F language or dialect uses or shares such a word, then it is likely to be either a loan from KɪnɪLaamba, or the language borrowed it from the same source.

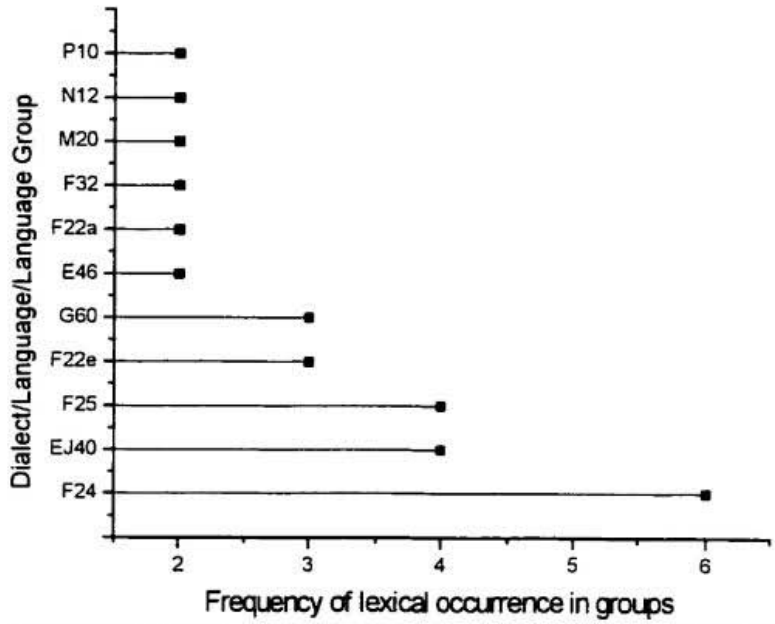
(161) Areal vocabulary, derivation, morphological innovation and borrowing (15 words)

carry, convey **kʊ-keeŋka** (F32 -keeŋka) M31 u-kwega? G65, EJ25, EJ40 -ɣeɣa; N12-gega?
climb **kʊ-naaŋkɪla** (F31a, F31b), **kʊ-naaŋ̊ɪla** (F31c) EJ41 -yanigira?
dust, cloud of dust **lʊ-ŋkʊʊndɪ** (F24b lʊ-ŋkʊʊndɪ, F25 lʊ-ŋgʊʊndɪ [G60] -ŋkundi; M25 i-kundi
louse **m-pani** F22a, F22e, F24 m-pani; M20 m-pumi; [East Ruvu] mani/m̀ani
milk **ma-sʊʊnsʊ** (F32, F33, F24 ma-sʊʊ(n)sʊ) E65, G22, G50 ma-susu[27]; DJ64, M22 ama-fyufyu(cf EJ13 ama-ʃununu? EJ15 ki-sununu?) Widely distributed generally.
penis **ki-lʊga/mi-lʊga** (F31a), **ki-dʊga/mi-dʊga** (F31b), **i-lʊga** (F31c) (F32c i-rʊɣa; F22e, F24 -lʊga; F25 i-lʊwa) (cf [EJ40] uru-zuŋga? E46 ke-ʃuŋga? Cf also [Rutara] ku-cuga 'copulate (with')): extension of meaning, as euphemism meaning 'paddling tool', < PB *-dug- paddle *vt vi*
quarrel (vi) **kʊ-kɪleea** (F31a, F31b), **-kilea** (F31c) G51 ku-lirewa
rest, take a holiday **kʊ-ʃʊʊpya** (F31a), **kʊ-sʊʊpya** (F31b), **kʊ-sʊpya** (F31c) (F22a, F22e -suuha; F22b -isuuhya; F24 kʊ-suupa; F25 kʊ-supa) [G60] -suupa
rooster, cock **mʊʊmbɪ** (F31a, F31b), **mʊmbɪ** (F31c) restriction of meaning (< PB *-cʊmbɪ 'chicken' or < PB *-bʊʊmb- 'mould pottery, create'?
set (of the sun) **kʊ-ʃaalɪɪla** (F31a), **kʊ-salɪɪla** (F31b), **kʊ-halɪɪla** (F31c) F21c -salalɪla; E46 -ʃala, -syala; [EJ40] -ʃara?
spider **tyati** (F31a, F31b), **itati** (F31c): derivation and extension of meaning, < PB *-tat- 'tie up'
stem (of maize, millet) **lʊ-peleli** (F31a, F31b), **i-peeli** (F31c) (F10 i-helele; F25 ma-pelele; F21, F22, F23c ma-βelele) M10 im-pelele; M20, i-pelele/ama-pelele; [M30] imi-pelele; EJ402 liβerere; [P10] -pelele; N12 lipehe; semantic shift? < PB *-bede millet, eleusine, sorghum'
tomorrow **mu-daaʊ** (F31a, F31b), mu-daʊ (F31c) [G60] ki-lawu/ki-lavu; [N10] ci-lawu; G50 ci-lau; [P10] malabu/malabo Difference of prefix only, and F31 is unique
wind **n-zega** (F31a, F31b), **ŋw-eega** (F31c) (F24 iɲ-jega[28], F25 ʊm-weya) G51 l-yega; P15 li-yeɣa;
word **lʊ-kaani/ŋ-kaani** (F31a, F31b), **lʊ-kani/ŋkani** (F31c) (cf EJ40, [EJ25] e-ŋana/ama-ŋana: semantic shift: < PB *-kaani- 'to contradict', and in EJ40: ŋk > ŋ < ŋ-kaani (See Nurse 1979b:433 on ŋk > ŋ)?

---

[27] From Nurse (1979b:542)

[28] From Nurse and Philippson's list



■ Figure 4.10 Areal frequencies between F31 and other languages

4.2.1.2.12 KIRImi (RI) (78%) (GiAhi - GIRwana - ɣIIyaMunyiŋanyi))

The 10 words (20%) out of the total 49 as unique inventions in KIRImi suggest group cohesion. On the other hand, the group is heavily mixed as the speakers have interacted with others from adjacent languages. Shared vocabulary indicating that mixed nature of lexical stock is 80%.

(162) Unique vocabulary (10 words)

axe **gI-heendo** (cf P25 imbendo)
clothes, material **i-saa/ma-saa**

crown of head **-bʊʊsa**
hoe **i-kʊʊjo**
medicine, remedy **ma-hʊka**
pronounce **ʊ-haʃa**
tail **ɪ-ɸʊʊmbʊ**
thicket **-Rʊŋkʊ**
try **-sooya**
up, above **gʊ-ʊnto**

(163) Areal vocabulary, derivation, morphological innovation and borrowing (39 words)

birth (give), to a child **ʊ-ɸaaɸa** M20, M30 ku-paapa; G64 xu-baba; N12 ku-baba
parent, s he who begets **mu-ɸaɸi** G66, [M20] m-pafi; M30, P13 -papi
blood **-saɣami** (F31c, F33 -sakami) [G30] -sakame; Thagicu, E65 -θakame; E46 n-daxame; [Rutara], DJ65 -ʃagama/-sagama; [E60] -samu? (in some E60 languages: g > Ø, e.g. -waa 'kill' < PB * -bʊdag- 'kill'. For *-samu* see Nurse 1979b:108, West Kilimanjaro (Masama - E62a), Rombo (Mashati-E62c): *i > u, *u > i as in KiWunjo (E62b), KiRombo (E62c) *mburu* 'goat' < PB *-budi; -eri 'chin' < PB *-dedu, and therefore, -samu: Proto Southern Cushitic *sak' 'blood'[29] → -sagami → -sagamu → -samu?: borrowing from Proto Southern Cushitic.
breathe, rest **gʊ-hea** [G60] kwe-ehela; [Luhya] oxu-hera; [EJ40] -hecera (cf P23 ku-yewelela)
brother (older) **mu-una** (F31b mu-nuna) Northern Dialects of KiSwahili innovation *m-nuna 'younger sibling' as in G41b, G42d mu-n̪a (Nurse and Hinnebusch 1993:300) (cf EJ13 omu-rumuna; E52 mʊ-rʊa ŋina; E54a mu-rua jia; EJ42 mo-mura)
day after tomorrow **ɸiŋ-kɪo** EJ42 eŋ-kio ende; G24a -kioi; EJ11 -kiro
far **kw-eeŋgɪ** cf Barbaig ʃagi 'far'
fly (vi) **ʊ-ruma** (cf P15 ku-jumba; P22 ku-lumpa; G36 ku-zum̊a; E74a ku-zumba, ku-zump^{h}a)
follow **-hooŋga** G65, G66, M30 -koŋga; [M10], M20 -koŋka (*k > x where it is phonetically easy to change to /h/ before low vowel /a/ or back /o/ in KɪRɪmi, although elsewhere, *k > k)
get, obtain **ʊ-haaŋga** G51 kw-aŋk^{h}a
hate, detest **ʊ-hʊra** [Thagicu (i.e [Thagicu] ku-θuura and E46 -soola)]; Luhya oxu-syula; [E62] -sua;

---

[29] Compare explanation given by Nurse 1979b:513 on the status of -samu 'blood' as an unlikely loan from KiSwahili damu 'blood', which is a loan from Arabic *dam*, a word which may not be used now in Arabic, and whose original meaning in Arabic is obscure (Bosha 1993)

lean, become; grow thin **ʊ-xoxoa** EJ14 oku-koha? M24 ku-hoha? (G65 uku-sokoka?, G35 ku-soka)
look around **-iheeŋga** [Luhya] oxu-henzahenza?
lost (get) **-yaɣa** G60, [N10] ku-yaga; Seuta, East Ruvu kw-aga, E55 kʊ-a, kw-aa; P23 ku-yahika; E74a ku-lagaya;
love, want **ʊ-yaaɲja** [EJ40] -haɲca; [Luhya] xu-yanza
marriage **-ilooɣoa** (cf F31a -loogwa 'love, want') E74a ku-lowoa; DJ65 ku-loŋgora
milk (n) **ma-aya** (cf [E62] ma-lla < ma-nla < ma-lela (as in E62d): borrowing . Proto Southern Nilotic *[ʲ]e:[ʲ]- 'white' (Ehret 1971:138).
milk (fresh) **ma-hʊʊŋga** (F21b, F21c ma-sʊʊŋga; F23b ma-suuŋga; F23a ma-suka)
mother **iyʊʊ** (F33 iyo; F31c iyaa, F21b iya) EJ441 yiya: borrowing: < Barbaig yiya, Proto Southern Nilotic *iiyo
old times, the past **ka-eŋge** G35 u-heŋga
pipe (tobacco) **i-fuunde** (F33 -puunde; F34 ke-buunde) EJ45 eke-βonde; G35 mu-nde; EJ24 eki-bunda? (cf Barbaig kaponded)
pit, hole **i-koombo** (F31c i-koombo) G36 -kombo; P15 li-ɣumba? [Cf DJ60] ik-yoβo?; EJ25b er-yobo?; EJ31 li-lowoo?; EJ31c -dopoo?; [EJ40] mw-oβo?)
pour away **-hunʊa** (F31c -hunʊla) G61 -kunula
push **ʊ-suntɪɪya** EJ43 uku-hunia; G65, M21 uku-suɲcilizya; (cf EJ42 ko-sukia?; G32 ku-suŋ̊iza?)
quiet (be) **ʊ-kila** EJ40, [Thagicu] -kira
return **-sʊka** (F31c kʊ-sʊka, F24 -syuxa[30]; F33 kʊ-fyʊʊka) Thagicu -cioka (cf F21, F22b, F31a/F31b, -ʃooka/-ʃooga) 'return *vi*', -ʃooʃa 'return *vt*, reply' '
rooster, cock **ɲ-jololo** (F24 ɲ-jogolo; F25 i-jogolo)
search for **-ɸeeɲja** (F32c) (F10 ku-heensa; [F22] kʊ-pesʊla/kʊ-pesa) EJ31 -peeɲja; EJ25a oku-yeɲja; (cf EJ41 kw-eɲa; E62e -seŋgeta; M25 -hwanza)
shame **miɲaa** (F31c miɲala; F21 minala; [East Ruvu] miɲala
shiver **ʊxaxaRa**[31] (F31c kʊ-kagata) (cf EJ43 oko-gaŋkana)
small **ɲʊɣʊ** (F32c) P14 -cuku (cf EJ 40 -suhu)
spear (n) **mʊ-koha**; [P10] [West Ruvu], G50, [G60], m-koha; Seuta, [East Ruvu] -guha; [N10], ŋ-oha (cf F21c ŋ-guha < mu-guha 'small, spear-shaped, functionally double-ended, big needle either used for sewing hard materials like leather or in KɪSukuma medical operations, and it resembles ŋ-gela, which is such a big needle used exclusively for medical purposes')

---

[30] From Nurse and Philippson's list.

[31] In KɪRɪmi, the voiceless flap represented as [R] is a regular reflex of PB *t in many words, although it often occurs in free variation with /t/ (See Olson (1964:13) on the allophonic nature of [R]).

sweat (n) **mu-RuRu** (F21c li-duutu) North Rutara e-tutu (cf P10 li-usu): derivation and extension of meaning < *PB -tu 'spit'
sweet, pleasant **-loombe** M14 -lyompe; ([EJ40] -omereru?)
thigh (of human/animal) **gɪ-nama** (F31c kɪ-nama) E60 ki-nama; [EJ40] eke-nama; [Luhya] esi-nama; (also G61 iŋki-ɲamana)
tomorrow **ɸadiʊ** (F32c) EJ16 iðo or idiho - possible misspelling as given: *idho*?
wash clothes **-homboa** [Thagicu] kʊ-θambya ŋgʊa? (cf E46 -sabya?)
what **ntʊʊni** (F31c ntʊʊni) M24 honi? [East Ruvu], M32 coni?, M23 ʃoni?
word **i-haʃo** (cf F21/F22 muhayo)

Apart from those groups in Figure 4.11, other dialects, languages or groups which share one word with F32 include G64, N12, P13, E65, Southern Cushitic, G51, EJ441, F34, EJ45, EJ24, M21, F25, EJ31, G40, G24, P22, Corridor, E55, P23, F23, F21b, F10, P14, G50, West Ruvu, North Rutara, P10, M14, E60, EJ16, M32 and M23.

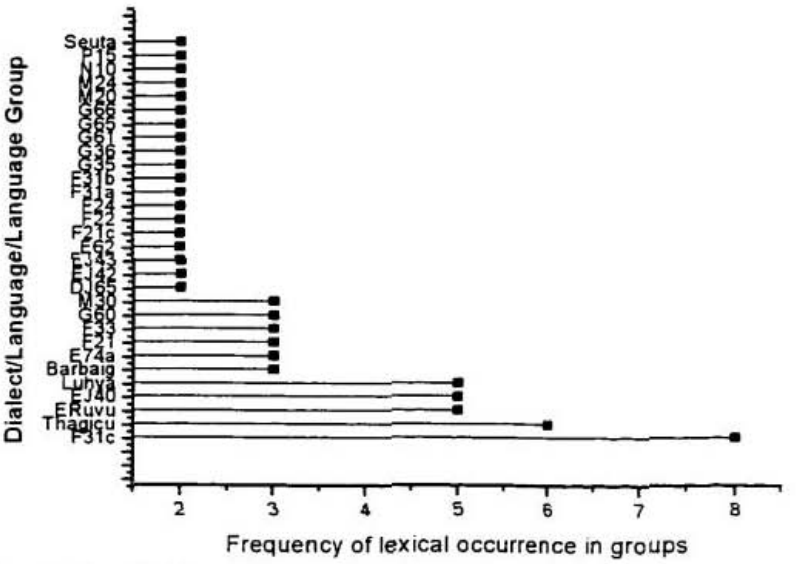


Figure 4.11 Areal frequencies between F32 and other languages

4.2.1.2.13 NM (78%) (KIKIImbʊ - KISukuma - KINyamweezi)

Only four words join these three language groups, KISukuma (F21), KINyamweezi (F22) and KIKIImbʊ (F24). The four words can be accounted for in terms of diffusion from a common source, either from among them or from a common ancestor. This account is plausible because all 4 words are not unique to these 3 members alone. They are also found in zones DJ, EJ and G, among others, as areal words.

(164) Areal vocabulary, derivation, morphological innovation and borrowing (4 words)

bush, forest **-poolu** (F23a i-poolu; F25 i-pooli) [DJ60] i-polo; East Ruvu P12 -poli /-hulo?

calf of leg **-saluta/saluda/n-saluta** (not mentioned in F21a, F22a, and in F22d n-salula) EJ44 e-saruta; EJ43b i-sutwa; (Cf Gisamjanga, Barbaiga[32] hâw-da 'thigh', Proto Southern Nilotic *aR (Rottland (1982:296))
thigh (especially human) **i-taaŋgo** [EJ40] ri-taŋgo; [Luhya] -raŋgo; DJ65, DJ66 i-tako; G23 -tako (cf DJ62 i-tako 'female thigh');
try -gema (F23a, F23b -gemezya, F23c -gemeza) EJ402 -gema; (cf E54a -gena)

Of these languages and languages groups, only SiSiloombo (F23a) shares two words with NM (KɪSukuma (F21), KɪNyamweezi (F22) and KɪKɪɪmbʊ (F24)). The rest share with this grouping only one word. These are F23b, F23c, F25, DJ60, DJ65, DJ66, East Ruvu, P12, EJ44, EJ43b, EJ40, Southern Nilotic, Luhya (EJ30 and EJ41), G23 and EJ402. Such a distribution does not tell definitively about genetic affiliation since even the areal vocabulary is widely distributed.

4.2.1.2.14 NL (76%) (KɪKɪɪmbʊ - KɪSukuma - KɪNyamweezi - KɪnɪLaamba)

The small number of shared innovations in this lexicostatistical node makes it doubtful as a historically valid grouping, as in the NM (KɪKɪɪmbʊ + KɪSukuma + KɪNyamweezi) case above. The unity of the node supports a retention-based explanation, which is a weak classification criterion. Three words out of the four can be said to be uniquely NL (KɪKɪɪmbʊ + KɪSukuma + KɪNyamweezi + KɪnɪLaamba). But the major drawback is that, one of the major members of the group, F24b KɪKɪɪmbʊ South, does not have all three words in our sample. The absence of these three words in F24b suggests a later diffusion

[32] There are two ways of representing this name, Barabaig and Barbaig (Rottland (1982:27)

from one language rather than innovation within an earlier group (NL) before a split. This areal account is supported by the relatively heavier influence on F24a by F22 dialects because of F24a's closer proximity to F22 compared to F24b. In addition, the last word 'remember' is shared by Rutara (EJ11-4, EJ21-24) and Corridor-Nyiha (M20) languages exclusively, indicating a possible source from them as neighbours.

(165) Unique vocabulary (3 words)

face downwards (lie on one's stomach) **-bundaala**[33] (not indicated in F22a, F24b) (F23c -βuundaala) (cf [EJ40] -βumara?)
pot, vessel **kɪ-seme** (F23 -seme) (not indicated in F24b)
stick **mu-laaŋga** (F21b,c naaɲa (< mu-laaɲa); F32 mw-aaŋga) (not indicated in F31a,b and F24) (cf N11 n-deŋga; N12 n-doŋga?)

(166) Areal vocabulary, derivation, morphological innovation and borrowing (1 word)

remember F24 **-ijʊkɪla;** F22 **kw-izʊkɪla**; F31a,b **kʊ-kɪjʊka**; F21 **-izʊka**), (F23a - izʊkɪla, F10 kw-isukila) (cf F23b -iβʊkɪla; F23c -iβuukɪla), Rutara -ijuk(il)a; [M20] -izuk(il)a; M11 ukw-idukila; [EJ25] -icuka

[33] In the majority of dialects, the initial phoneme in the root is /β/. In others, it is /w/ or /u/. /b/ is used as a proto-phoneme

4.2.1.2.15 NR (72%) ((KIKImbʊ - KISukuma2[34] - KINyamweezi - KIIlaamba - KIRimi)

In the linguistic tree constructed for Zone F in section **4.1.1** above, this is the final stage in which the languages appear to be closely connected lexically. But even this connection is not necessarily genetic, because areal features can spread quite quickly if there are favourable conditions for adjacent social networks to be established. There is no strictly unique lexical item joining this lexicostatistical group. Only one word (14%) partly appears to be a unique innovation, *-daale* 'pack, flock'. However, since it is also reported in M12 (KiLuŋgwa), a F22 neighbour, it suggests innovation in one area only and with later spread to other languages through contact. Since *-daale* is associated with an animal flock, it is likely that F24 might have borrowed it from F21 or F32 where animal husbandry is more entrenched. The occurrence in non-pastoral speech communities suggests borrowing, and since animal herds and their herders can be mobile over long distances through trade or emigration, cattle-related words can spread quite easily. The linguistic and the socio-economic cannot be separated, since the socio-economic activities and interaction directly influence people's experiences and how those experiences are expressed in their languages. Because the words in this group are areal or occur in other zones as well, the implication is that they are inherited or borrowed from a common source. With such a distribution therefore, the genetic status of the group is doubtful and inconclusive.

---

[34] KISukuma2 is equivalent to (KImunaSukuma, GInaNtuzu, JinaKIIya) + KIDakama while plain KISukuma refers to KImunaSukuma, GInaNtuzu, JinaKIIya only. This has been pointed out above (section 4.2.1.2.3).

(167) Areal vocabulary, derivation, morphological innovation and borrowing (7 words)

pack, flock, group **i-daale/ma-daale** F31a,b dyale/ma-dale; F32b dae/ma-dae; F32c i-de; (not mentioned in F21b, F22a, F32a) F23, M12 i-daale/ma-daale. Also in East Ruvu like KiZalamo: loanword from Cushitic (Ehret, p.c.)

boundary **lʊ-bɪɪmbɪ** F25 ʊlʊ-wɪɪmbɪlɪ (not mentioned in F32a[35]) South Rutara, EJ25b oru-bibi; F10 i-βiβi; DJ60 uru-βiβi; [EJ40] oro-βeβe (cf F22d lʊ-βʊʊmba; [F23], lu-vuumba; EJ45 oru-βuβa)

love, want **-togwa** cf F31 a kulyoogwa; F31b kʊloogwa; F31c kʊlowa; (F23[36], F25 togwa) (not mentioned in F32) cf G65 kunogwa; G35, G37 kunogela (F21c -toga 'object O please subject S')

pole (thin) **-kito/-gito** (not mentioned in F21a) (cf F32b fiRo; F24b -sito) cf also [G60], M31 ulu-sito; [M10], M32, [Seuta], P13, P22 -fito; G52 u-fitu; DJ66 i-fyito; P14 -hito; EJ14 umu-sito. Also wider distribution in East Africa generally as in KiSwahili (G42d); [Thagicu] ru-bito?

sharp (be) **-yʊkɪpa/-yʊgɪpa** (F31a, F31b -yʊpɪka; F23a, F23b -ugiha; F31c ɲ-ɪgɪ 'sharp') (not mentioned in F21b, F22d, F24b) *[Luhya]* -ogiha; [EJ40] -ogeha; EJ24; -uhiga; [Thagicu] -ʊgɪba; cf; E61 -yoi-ya; and EJ25b, M32 -ugi 'sharp'

sheep **-kolo**[37](F21, F22b, F22e ŋolo; (ŋ-kolo (F22a), (not mentioned in F22d) G11[38], [East Ruvu] -kolo; [G60], i-ŋolo/-koondolo[39]; < -kolo < PB *-kodo 'sheep'

well (n) **-ji/zɪ** (F23a lw-inzɪ) (not mentioned in F22d), EJ15 luz-zi; P13 lose; Derivation < PB *-yɪjɪ 'water'

---

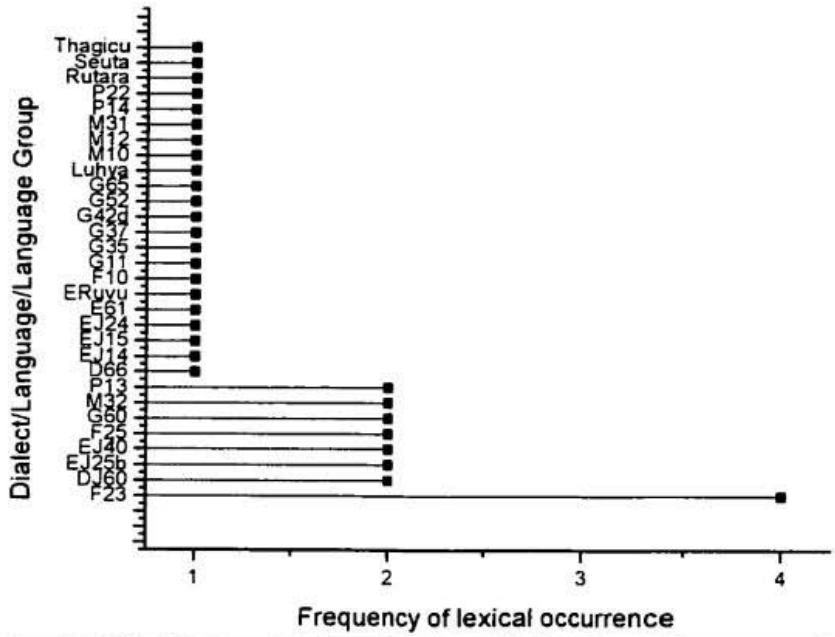
[35] The informant was not sure.

[36] From Nurse and Philippson's list.

[37] Although this word is part of Guthrie's (1967-1971, Vol.3:291) reconstructions for Proto Bantu, as a recent acquisition in Eastern Bantu, there is uncertainty about its origin. For instance, it was not clear whether the word was actually borrowed from outside Bantu or not (Ehret 1968b:217), although later, Ehret (2001, p.c.) affirms that -kondolo is a Bantu derivation while -kolo is a loan from Eastern Sahelian *kwar.

[38] The languages in this category are from Nurse's field notes prepared in the 1970s. Some of the languages like G11 iCiGogo are not in CBOLD at the time of writing this line. In comparative examples, G11 has not featured because of that reason.

[39] On the other hand, Nurse and Hinnebusch (1993:669) assert that ŋ-kondolo 'sheep' in some Sabaki, Ruvu and Seuta languages is of non-Bantu origin.



■ Figure 4.12 Areal frquencies between NR and other languages

One major problem in this set of words is that some of these words are not found in certain languages/dialects, making their unity even more doubtful.

4.2.1.2.16 Zone F

(169) Unique vocabulary (1 word?)

old person (male) **mu-nampala** (not mentioned in 7 out of 22 varieties: F10, F22a, F22d, F24, F25, F33, F34*)*. The one word is found nowhere else with one major problem: F24 as a prominent member of Zone F does not show the word, even F24a which is relatively proximate to F22. But also, two dialects which form the cores of Zone F, F22, do not show the word, F22a and F22d, indicating that, the word may have originated from F21, F31 or

F32, from mu-na-m-pala 'the one with the bald head'[40]. From one source, it spread to the rest, especially given the absence of serious physical barriers between the speech communities.

Rather than define Zone F as one unit, the one word or (6%) out of the total 16 in (169) only happens to be in the zone in most, but not in all, of the language varieties. This word is **munampala** 'old male person'. The speech communities being relatively adjacent to each other, but then sharing only one unique word as a marker of their genetic affiliation casts serious doubts on the claim. In addition adjacency also disturbs the core of Zone F by introducing the possibility of a word spreading easily from one source, so that a few shared words confined to Zone F alone can be only accidental. Furthermore, most of the intermediate lexicostatistical nodes forming Zone F are not as genetically cohesive as shown by the qualitative analysis of the vocabulary. Since reliance of unique innovation for the validity of Zone F is placed on one word only, the qualitative evidence is not hard. This word is likely to have originated from only one of the languages and simply spread, due to the often friendly relations which have existed between these core Zone F community members, with frequent intermarriages and cross-migration sustained over a long period of time. If smaller populations in the earlier constituent F languages are assumed, living relatively even more closely than is currently the case, then the spread of words might have been much easier and faster, all conditions being equal, and hence, this word does not isolate Zone F as one historically cohesive group. The word excludes an important member of the traditional Zone F core, KIKIImbU (F24), both northern and southern. The other varieties in which the

[40] Suggestion by and discussion with Nurse, personal communication, 2000

word is not mentioned are F10, F25, F33 and F34. The distribution of this one word not only weakens the core of Zone F significantly, but also it goes on to support what Nurse (1979a, 1995a, 1999) and Ehret (1999) have maintained over a period of time about the doubtful status of F10, F25, F33 and F34 within Zone F.

It is tempting to even suggest that this word is actually borrowed from Proto Kalenjin-Omotic, a word given as *pʌʌyʌʌn 'elder' (Rottland 1989:223). The form, meaning and distribution offer a strong argument. The path might have been pʌʌyʌʌn → payan → palan → pala → mu-pala → muna/muɲa-m-pala. The loan might have started in one language and simply spread to the rest. This source may be F32 (KIRImi) with a fuller form muɲampaa, although the /l/ is normally lost. In SSN, it was reduced to munampala, then to nampala and naṃala in F21/F22b. This argument adds to that by Nurse (p.c.) as being from '(person) with the bald head' < PB *mu (class 9 marker, which includes people) + *-pada 'bald'. Both hypotheses do not seem to have any strong justification as to why should 'old man' in this group of languages and not 'old woman' use a euphemism like 'the one with the bald head' or borrow from Southern Nilotic. One suggestion would be the higher status and esteem which the Southern Nilotic elders seemed to have been enjoying in the eyes of outsiders, and it might have acted as an incentive in the speech communities in contact with them to adopt and adapt the term[41]. In fact, there were intermarriages between them, especially in eastern

[41] In most of Rutara like in oRuHaya (EJ22), the idea of using a euphemism, a loanword or a grandiose term is also observed (as in F20/F30) where 'old woman' is the (continued...)

βʊSukuma where contact was maintained as the Datog continued to move in and out of the area they once lived (Itandala 1983:189). In this contact, some Datog were absorbed into KɪSukuma society, by the βaβiinza clan, and with this absorption, many cultural aspects were also acquired, especially in livestock keeping which made the predominantly agriculturalist βaβiinza into pastoralists as well, being selective of those aspects which were only beneficial for them (Itandala:ibid). This fact is borne out by the Datog proper names for both females and males, place names, some rituals, name for the Datog god Asita, etc, indicating that the contact between Southern Nilotic groups like the Datog was harmonious and mutually beneficial rather than the adversarial nature implied in contact situations and/or replacement of one speech community in an area with another. They might have moved out of the way because their exclusively pastoral way of life became incompatible with the now mixed farmers βaSukuma, who continued with their farming tradition after adding cattle keeping.

The term for 'old female person' in many Bantu languages is composed of two morphemes, PB *-ka, *-ke or *kɪ 'woman, female' and PB *-kʊdʊ 'big, or old', forming mu-ka-kʊlʊ, mu-ke -kʊlʊ, or mu-kɪ-kʊlʊ respectively, or other such words with 'person' and 'old' in

---

[41](...continued)
regular o-mu-ka-i-kuru and 'old man' is either o-mu-gurusi (sg)/a-ba-gurusi (pl)' 'founder or patriach', or omu-karuka < Proto Southern Nilotic *kɔːrk 'married adult (Ehret 1971:136). Abagurusi, as those clan founders who constitute oRuHaya society, just as the KɪSukuma case and their clans: ŋ-gɪ-kʊlʊ 'old woman', naṃala/βanaṃala 'old man' indicate absence of classless society as is often implied in earlier Bantu prehistory (See Cory and Hartnoll 1945 [1971]) and Itandala (1983) for a discussion of clans and their founders in the respective speech communities).

either order. The term for 'old male person' from PB is normally derived from two words from which many other variations are possible: mʊ-ntʊ 'person' mʊ-kʊlʊ 'big, or old' as in KiWoso (E62d) ndu ŋku < muntu mukulu or as in Gɪkʊyʊ (E51) mʊndʊ mʊkʊrʊ, or in Maragoli (LuLogooli) (EJ41) mukurundu < mu-kuru mu-ntu; and mʊ-lʊme -kʊlʊ 'big or old male'; as in KiSeri (E62e) mmeku < mulumekulu.

The remaining 15 words, or 94%, do not define Zone F either. They occur widely across neighbouring zones also. With inter-dialectal borrowing, this is not surprising. The most telling feature of these words is that they are borrowed, mainly from Southern Cushitic (cattle terms), Southern Nilotic (some cultural items like terms for animal hides/skins) or KiSwahili (trade terms like metal pots and tins), indicating the lexical impact from one source facilitated by movement inherent in pastoralism and trade, and therefore the 'movement' of these words from a recent past.

(170) Areal vocabulary, derivation, morphological innovation and borrowing (15 words)

bull **-yagamba** (not mentioned[42] in F10, F22d, F24b, F25, F33). This word occurs in two shapes *-yagamba*, as in most of Zone F and *-kambako/-kambaku* as in [G60] -kamba-ko: M20, M30, N10, P21-kamba-ku; borrowing < Iraqw yaqaamba (sg), yaqaambee (pl) 'bull, big male animal'. Where it occurs in Zone F, the word comes directly from Iraqw.
calf **-dama** (not mentioned in F10, F31c, F32a) Seuta, East Ruvu, G52, [M10], M32, P11 n-dama; G61, M22 in-dama; Burunge, Sandawe dama: borrowing < Iraqw dama

[42] Lack of mention may reflect more than one fact: absence of such a word, informant forgetting a word or being unaware of its existence, even when it does and confusing between similar concepts and mentioning the wrong one.

cattle **mi-tugo** (not mentioned in F10, F23b, F22e, F33, F34). Occurs in three shapes, with stem-initial /t/, with stem-initial /f/ by process of Bantu Spirantization and with regular /t/ followed by prenasalized /g/ [ŋg] instead of /g/ as in [EJ40]-tugo; E74a, [Seuta], [East Ruvu], G52 mi-fugo; [Rutara] i-tuŋgo ly'ente; [DJ60] iβi-tuŋgwa; (cf EJ32 mi-rugu; N13 mi-pugo?) Innovation by a proto language from which some Zone F members descended (cf Eastern African Bantu and Ruvu languages in Hinnebusch and Nurse 1993:585).

goat (he) **ŋ-gulaati** ([F22], F23a,b, F24, [F31]); **ŋ-gulyaati** (F21), **ŋ-gulaata** ([F32], F33, F34) (not mentioned in F10, F22a, F23c, F25, F31b, F32a). G35 vulati; Seuta -vulata, -vuata; Barbaig qwarayda; Iraqw gurta (sg), gurtaawee (pl) (see Maghway (1995); Buruŋge gwerati; Kw'adza gulata < Proto Southern Cushitic *-ʔogur- (Ehret 1980:293). The word, though from the same source, displays two major areal phonological features which define three different geographical groups and phonological influences: -gulaati, -gulyaati and -gulaata with an -i/-a divide, most probably depending on the route the word took to reach them. The -a word suggests a direct route from the source, and it is in Seuta only (G23, G24, G31 and G34), while the -i is not based on direct transmission, or the plural form, gurtaawee, was taken instead of the singular gurta. This is found in iKiLuguru (G35) and some members of Zone F only, resembling the Buruŋge gwerati.

lime, whitewash **-swaakala** (not mentioned in F21b, F31a, F31b, F32c, F34). [G60], P10, P20, Corridor -swakala/-cokala; EJ25; [EJ40] -swakara/-cokala; N10, cwakara/-sokala; DJ66 i-ʃwaŋkala; [East Ruvu], Barbaig, [Thagicu], [Seuta], [Rutara], [G50], [Luhya], [Chaga], [North Nyanza] -cokaa: borrowing: from G42d, through English 'chalk'? This wide distribution of the word suggests that it is a recent loan from the same source, most probably English, especially if it is associated with house decoration on sealed walls. It is unlikely that completely plastered walls were common in such hot and humid climates where mosquitoes, the heat and darkness would discourage such house construction. The word is also unlikely to be found in languages which did not have any strong English impact. The need for *n-swaakala* is hence highly dubious as a native concept in hot climates apart from borrowing from a culture which needs sealed houses because of weather conditions like extreme cold. In cold climates like the vicinity of Mount Kilimanjaro and the Upare ranges (E60), Bukoba (EJ20), Mbeya (M30) and Iringa (G60) a native word is likely to have been in place already, making borrowing unnecessary. This fact is corroborated by the absence of *-swaakala* in dialects/languages either located in relatively cold climates or those in isolation like G62 (iŋgeesi), G63 (iŋgedzi), E65 (mlaci), [EJ20] (-noni), M30 -paɲa; E46 mbarimbari

look after grazing cattle **-dɪɪma** (not mentioned in F10, F25, F31b, F33, F34). M13, [East Ruvu], G52, G60, M20, [N10] ku-diima; M31 uku-tima (cf N14, P13 ku-lima) borrowing: < Iraqw/Alagwa deʔem- 'to herd' < Southern Cushitic, from Proto West Rift (see Ehret 1980:190; Nurse 1988:64-79; Batibo 1992b:63)

monkey (small, lightish-coloured) **n-tʊʊmbɪlɪ** (not mentioned in F10, F23, F25, F32a) East Ruvu, [G60], N10, P20 -tumbili; [P10] -tombele; Seuta, [Corridor] -tumbii; EJ32 in-duvili; (M32 ŋ-gambili?) Innovation by a proto language from which some Zone F members descended. Also widely distributed in East African languages like KiSwahili *tumbili*.

one-eyed (being) **-sooŋgo** (not mentioned in F22d, F31, F33, F34). EJ25, [Luhya], [EJ40] -sooŋgo; N13 -soŋgu; Thagicu -θoŋgo; Seuta, East Ruvu , G51, P13 -coŋgo; DJ61, [Rutara] -ʃoŋgo; (cf EJ402 eke-toŋgo?; EJ43b ege-toŋgo?; EJ403 eke-toŋo?; EJ42 ege-toŋo; [Corridor] -toŋko (mbali)?) semantic innovation: < PB *-coŋgo ''point'?

pool, pond **-laambo** (not mentioned in F10, F25, F33, F34). EJ41, G32, P14 -lambo; [EJ25] -rambo; G37, G60 , M10 -laamba. Innovation from a core then the word spread to others. This is another telling word where the four languages are effectively excluded. This however does not necessarily prove that the remaining members are genetically unified because the distribution of the word extends beyond Zone F.

pot (metal), cup **-kopo** (not mentioned in F10). DJ60, Rutara, EJ25, Seuta, East Ruvu, G50, G60, Corridor, M30, N10, P10, P20 -kopo; EJ40 -koβo; [E60] -kobo; Barbaig kop-ajanda (sg) /kop-ajega (pl): borrowing, < KiSwahili -kopo 'small tin'< Portuguese copo 'cup' (Tucker 1946:857). This is an illustration of late borrowing from a common source like KiSwahili (G42d) in which unrelated languages seem descended from a common, immediate ancestor where even Iraqw, a Southern Cushitic language, has *koopo* (Mous 1993:42). With this word, all the 8 Bantu zones occurring in Tanzania are represented (DJ, EJ, E, F, G, M, N, P). The word is significant in highlighting the potential for misleading conclusions when languages share a word. Sharing a word is not enough. The source of that sharing should ideally be ascertained beyond any reasonable doubt.

pot, mug **mu-kebe** (not mentioned in F10, F24b, F25). [DJ60], Rutara, EJ25, Luhya, EJ40, [Chaga], Ruvu, [G60], [Corridor], P10, P20 -kebe; [Thagicu] mʊ-keve. All zones except N display this word. It is a widespread word the source of which is obscure.

shin (bone) **-lʊʊndɪ** (not mentioned in F31c). [G60] -luundi; [Corridor] mu-lundi, omnundi wa lyulu; DJ60, [Rutara], M31 -lundi; [Seuta] muundi/-lundi; M13 uundundi; E65 mwindi (cf EJ42 omgorondo 'small leg'?) Innovation by a proto language from which some Zone F members descended, probably East African Bantu (see Hinnebusch and Nurse 1993:288)

skin (of person) **-dɪlɪ** (F23a n-dili; F23b n-dɪlɪ; F33 n-dɪrɪ; F24 n-tiila) (not mentioned in 6 of the 22 varieties: F10, F23c, F25, F31b, F32c, F34): Borrowing from Southern Nilotic as in Kalenjin *irir 'skin' (Ehret 1971:143)

sky **-luunde** (not mentioned in F10, F23c, F31b, F25, F33, F34). P13 lyunde; P21 kwiunde semantic extension < PB *-dunde 'cloud'

woman **mu-kɪɪma** (not mentioned in F23c, F31a, F31b, F33, F34). G62 u-muki-mama; (cf G63 umu-kidala). These words are probably segmentable as *u-mu-ki-mama* and *u-mu-ki-dala* respectively. *mukɪɪma* or something similar is found in two G60 languages, and the morphology of the word there shows more antiquity than those found in Zone F: Derivation, PB *-ke 'wife' + *-ma 'mother', to suggest 'woman who acts both as wife and mother'

Table 4.24 makes some important statements with regard to contact affirming both Thomason and Kaufman (1988) and Labroussi's (1999) observations on the role of proximity and the contact of different speech communities. First, F10, F25, F33 and F34 behave radically differently from the rest suggesting separate development with minimal contact with any of the other Zone F members. Secondly, the cohesion of the remaining members suggests areal

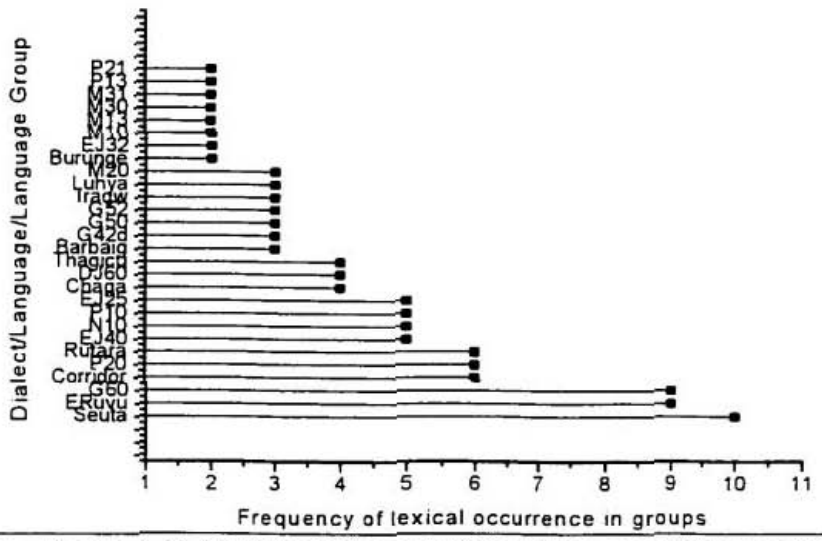


Figure 4.13 Areal frequencies between Zone F and other groups

influences rather than genetic affiliation, as demonstrated by F31 which is KInILaamba. showing less shared vocabulary, presumably because it is shielded from the direct impact of surrounding Zone F members. The other F31 members show higher shared vocabulary precisely because they are at the edges of contact with adjacent languages, with a higher possibility of mutual influence (See Maps 1, 2, 3 in Chapter 1 for the relative adjacency of the speech communities).

Table 4.24 Variety and frequency of occurrence of the 16 words shared in Zone F (in brackets) (1 word 'old male person' as unique to Zone F)

Variety	*Freq*	Variety	*Freq*	Variety	*Freq*	Variety	*Freq*	Variety	*Freq*
F10	*0[43](6)*	F22a	*0(15)*	F23a	*1(14)*	F25	*0(7)*	F32a	*1(12)*
F21a	*1(15)*	F22b	*1(15)*	F23b	*1(12)*	F31a	*1(12)*	F32b	*1(15)*
F21b	*1(14)*	F22d	*0(13)*	F23c	*1(9)*	F31b	*1 (8)*	F32c	*1(13)*
F21c	*1(15)*	F22e	*1(14)*	F24a	*0(15)*	F31c	*1(12)*	F33	*0(9)*
				F24b	*0(13)*			F34	0(6)

In order to determine further whether these 16 words are relevant in the genetic argument for Zone F, a semantic analysis is in order. Normally, there is a tendency for cultural vocabulary to be borrowed as contacts bring in new concepts and objects which require naming. With a majority of shared cultural vocabulary rather than core vocabulary, non-genetic affiliation is suggested, and vice versa. *Table 4.25* shows that out of the 16 words identified in (169) and (170) as defining Zone F, 6 are core, and 10 are cultural. Cultural vocabulary is subdivided into four groups: related to technology (Tech), Animal husbandry (Animal), Farming (Farm) and Geographical location (Geog). Possible sources of the words are suggested where feasible. All these words are shared by most of the other 7 Bantu zones in eastern Africa (Zone F being the 8th), indicating that the cohesion of Zone F is due to

[43] The numbers outside the brackets indicate the presence of mu-ɲampala 'old male person', which is the only unique innovation of Zone F, although it is only a partial uniqueness as explained in the text, since it may be a loanword from Kalenjin or a derivation from Proto Bantu.

convergence of different languages which drew their shared vocabulary from the same sources. In eastern Africa, 8 zones are represented: DJ, EJ, E, F, G, M, N and P (See *Map 1.3*, Chapter 1).

Table 4.25 Lexical analysis of Zone F shared vocabulary

Word in Zone F	*Other zones in eastern Africa*	*Vocabulary*					
		Core	*Cultural*				
			Tech	*Animal*	*Farm*	*Geog*	*Possible Source*
bull	GMNP	-	-	+	-	+	S Cushitic
calf	GMP	-	-	+	-	+	S Cushitic
cattle	DJ/EJ/EG	-	-	+	-	+	S Nilotic?
goat (he)	Seuta, G35	-	-	+	-	+	S Cushitic
lime	DJ/EJ/EGMNP	-	+	-	-	-	KiSwahili
look after grazing cattle	GMNP	-	+	+	-	+	S Cushitic
monkey	GMNP	-	-	-	-	+	NECB
old man	-	+	-	-	-	-	Kalenjin
one-eyed	DJ/EJ/E50GMNP	+	-	-	-	-	NECB
pool, pond	EJ/GMP	+?	-	-	-	+?	NECB
pot (metal)	DJ/EJ/E/GMNP	-	+	-	-	-	KiSwahili
pot (mug)	DJ/EJ/E/GMP	-	+	-	-	-	KiSwahili
shin bone	DJ/EJ/E60/GM	+	-	-	-	-	NECB
sky	P	+	-	-	-	-	PB
woman	G60	+	-	-	-	-	PB

4.2.1.2.17 Other groups: KɪnɪLaamba and KɪRɪmi

Three words (20%) out of the 15 are unique to F31 and F32, and the remaining 10 or 80% are shared with other languages. While geographical proximity and lexical inter-dialectal borrowing cannot be discounted, the unique creation vocabulary count attracts attention. This points strongly to some close relationship, although the lexicostatistically based tree used above does not show this closeness. For example, Nurse (1979a:28) points out that in West Tanzania (roughly Zone F, without a few members), F31 and F32 stand out as the only ones without Class 13 tʊ- (diminutive, plural) which normally forms the plural of Class 12 ka- (diminutive, singular). Instead, they form that plural using Class 19 pɪ-, normally a locative morpheme 'at'. Two interpretations can be advanced here: first, KɪnɪLaamba and KɪRɪmi are genetically related, although they might have split a long time ago in the past. The second interpretation is similarity in unique vocabulary as an areal feature. The other languages in the vicinity could not have exerted any stronger influence because of their geographical locations, and therefore only these two influenced each other with regard to those words which were invented by one language and spread to the other.

One supporting piece of evidence of the historical validity of F31/F32 is the grammatical aspect of Class 13 sharing. In addition, Nurse (1979a:28) notes the division of West Tanzania into two halves, the KɪSukuma, KɪNyamweezi and SiSuumbwa division, on the one hand, and the KɪnɪLaamba, KɪRɪmi and KɪKɪɪmbʊ belt, on the other, while the other

members assigned to this group have an unclear status. For the former group, he sees some relative homogeneity, while in the KɪnɪLaamba, KɪRɪmi and KɪKɪɪmbʊ group, their unity is less homogeneous. Within this group, KɪnɪLaamba and KɪRɪmi display this historical unity, although internally, the group as a whole which includes KɪKɪɪmbʊ, might be explained better by the second account, in part explaining the weak cohesion of the group.

(171) Unique vocabulary (3 words)

foam **-poombolu**
gather (flowers, fruit) **-kala**
run **-maaŋka**

(172) Areal vocabulary, derivation, morphological innovation and borrowing (12 words)

adze (carpenters') **-seeso** G24 seezo; (cf [P20] -teeso; G52 -tesu; [E60] -teso; M25 ʃi-teso; E54a, [East Ruvu] -tezo/n̪ezo; M14 n-tezo; [EJ25] -tesyo; P13 n-deso; and elsewhere in East Africa, as in Sabaki)
cobra (spitting) **-ɪɪlʊ**[44] (F34 ɲ-joka ɲj-ɪrʊ) F24[45], G62 iɲamw-ilu; E46 egaɲ-jiro; cf EJ41 ri-rubi
donkey **n-dogwe** [some M20] in-dokwe; F33 n-dakwi, F34 n-daako (cf DJ60 in-dogoβe; South Rutara en-dogobe (EJ24 n-dogove[46]); [some M20] in-dogobi; G61, 66 -dogovi; [North Rutara], EJ34 in-dogoya, en-dogoya, n-dogoyi; also cf E46 n-dikele; EJ40 -tekere, -tikere, -tikiri; E53, E54a n-tigiri; [EJ25] -sikili; EJ31c -sigiria borrowing: < Barbaig diged and < Proto Kalenjin sikir

---

[44] The forms in the individual dialects vary between /i/ and /ɪ/, /u/ and /ʊ/ and /l/ and /r/, the proto-form likely to be -ɪɪlʊ, < PB *-yidʊ 'black'. In subsequent forms, such a reconstructed lexeme is posited as the most unmarked and expected with regard to regular reflexes from Proto Bantu. Where relevant, KɪnɪLaamba acts as a reference point because of its least number of changes from Proto Bantu compared to KɪRɪmi.

[45] From Nurse and Philippson's list.

[46] From Nurse and Philippson's list.

fingernail **-kulukulu** by derivation and extension of meaning: < PB *-kudu 'tortoise'?
frog **-tʊʊndʊ** (is it a species of frog rather than a generic term? (cf F21c -tʊʊndʊ /n̪ʊʊndʊ/ 'toad' vs -daaŋga 'frog').
intoxicated (get) **-gaala** [G60] ku-gaala; M32, [N10] ku-gala; M25 a-gale (subjunctive)?
itch **-yaaga** EJ441 okw-iyaga
monkey (small, dark-coloured) **-pʊma** (Not mentioned in F31a, F32b, F32c) (cf F25 -ɪm-bʊʊma) unique creation in F31 and spread to F32? What about F25? (cf *baboon, ape* **-pʊʊma** (F24, F25 ɪɪm-bʊma) G61, G62 ili-puuma).
pig **ŋ-guluma** cf EJ32 iŋ-gulume
potato (sweet) **-doolo** F21 maan-doolo; D25, [M20] kan-dolo; [P10] kin-dolo; G34 n-dolo, and elsewhere in east Africa.
rhinoceros **-peembele** N12 ci-pembele cf DJ61 ru-hembe ; [North Rutara] eŋ-kura uyaru-hembe/ekuraru-hembe 'rhino with the horn'; M31 ki-pembe-kimo 'the one with one horn' P25 si-pambele?; extension of meaning < PB *-pembe 'horn'
testicle **-tʊʊmbʊ** cf [G60], P21 li-pumbu; Sabaki, M22 -pumbu ; East Ruvu -pumbu/m̪umbu; Seuta; P25 mumbu; E62c, P12 m-bumbu

The other groups which share one word with F31/F32 are DJ61, G24, G34, P20, E60, E62c, G52, E54a, M14, EJ25, P10, P12, P13, P21, F33, F34, F24, G62, E46, F21c, M22, M31,M32, N10, N12, EJ441, F25, EJ32, F21, D25, North Rutara and Seuta.

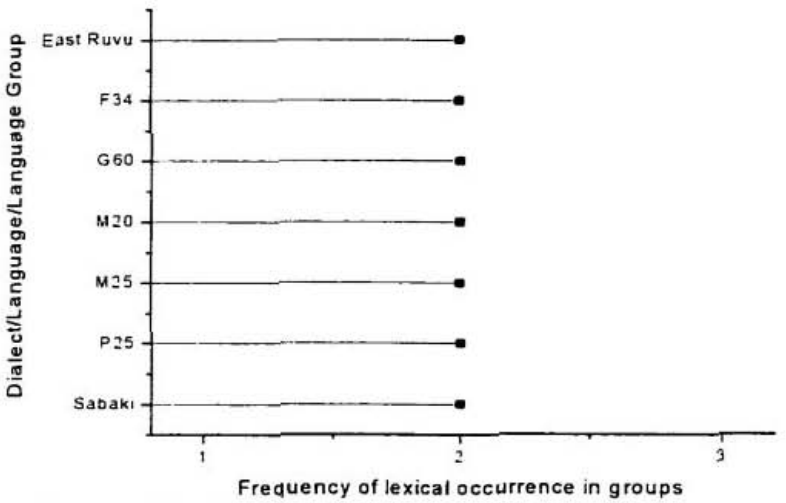


Figure 4.14 Areal frequencies between F31/F32 and other languages

4.2.1.2.18 Other groups: KɒɪLaamba, KɪRɒmi, KɪKɪmbʊ

The results in this sub-group are startling. Only one word seems to unite them, although even this one is shared by other groups. The most disturbing fact is that the word is not mentioned in F24b, the southern variety of KɪKɪɪmbʊ which shows less influence from languages of the north like F22.

(173) Areal vocabulary, derivation, morphological innovation and borrowing: (1 word)

shield **-gʊla** (F24a) G11, G12[47], G61, G66 ŋ-gula **Borrowing** (cf F21, F22b lʊ-ŋʊʊda)

[47] G11 and G12 are from Nurse's unpublished field notes.

This grouping is a good case which demonstrates the problem of lumping together languages when they are simply adjacent or because they show a high rate of lexical retention. This uneasiness is also mentioned by Nurse (1979a:28) who observes the loose unity between these languages. While they may be closer by retention, lexical innovation reveals more disunity. The cases of shared innovation like this one include mainly areal vocabulary which suggests there is normally a centre of innovation in one language and an area of spread to adjacent languages. Because of this weak lexical support, these languages may not be one entity historically, apart from the fact of being geographically adjacent.

4.2.1.2.19 Other groups: KiiRaŋgi and KeeMbuwe

Three words or 18% out of 17 words are unique to F33/F34, while the remaining 14 or 82% are shared by others, as indicated in Figure 4.15.

(174) Unique vocabulary (3 words)

beer **i-rʊsʊ** (F33), **-rusu** (F34)
pass, surpass **kʊ-looka** (F33), **ho-looka** (F34)
udder **ki-mɪɪra** (F33), **kɪ-mire** (F34)

(175) Areal vocabulary, derivation, morphological innovation and borrowing (14 words)

brother-in-law **maaŋge** (F33), **maaŋke** (F34) cf [Rutara] mu-ramu waaŋge/ mu-ramu-kazi waaŋge 'my brother/siter-in-law': compounding and reduction, < PB *damʊ 'brother/sister-in-law' + *-ŋge 'me'
follow **kʊ-tuba** (F33), **o-tuumba** (F34) E46 -tubagera; EJ24 ku-tubilila; cf EJ25 -ruba; E62e -idubisa; Barbaig dubagesht < Proto Omotic-Datooga *rʊp 'follow' (Rottland 1989)

grass, leaf **-saambe** D25 -samba cf EJ32 -sambu?; G35, [G50], [G60], [N10], P15, [P20] -samba/-hamba
marriage **i-loola** (F33), **-loola** (F34) (F25 iloole); G42d -oa < -lola < -loola
mushroom **i-rino** (F33), **ma-rino** (F34) cf DJ64, DJ65 iki-zinu?
pipe (tobacco) **-puunde** (F33), **ke-buunde** (F34) (F32 -fuunde) EJ45 eke-βonde; G35 munde; EJ24 ekibunda? (cf Barbaig kaponded)
potato (sweet) **kɪ-rasi** (F33) **ke-rasi** (F34) G42d kiazi/viazi. Widespread in East Africa
pronounce **kʊ-lusa** (F33), **o-losa** (F34) cf EJ31 xu-rwaasa
spoil **kʊ-saambʊra** (F33), **o-saambʊla** (F34) cf F21c -saambʊla 'demolish, especially a house or structure'
sweet, pleasant **mw-erere** (F33), **m-orere** (F34) EJ40 -comereru/-zomereru; Seuta -mw-ile; -mw-iiye; [East Ruvu] mu-lile cf DJ66 -βeleye, E46 -jamiryo
take, carry **kʊ-toola** (F33), **o-toola** (F34) G50, [G60], M10], [N10], P10 kutola; [Seuta] -toa/-doa
taste (vt) **kʊ-saera** (F33), **o-seera** (F34) EJ44g ko-sagasera
yesterday **niijo** (F33), **meejo** (F34) [North Rutara] ijo; [North Nyanza] jjo/izzo; DJ60 ejo/nijoro; EJ40 ico/izo; P20 liiso/liido; P10 liso; [N10], G50, lisu; cf E62e hiyo; E55 ɪyoo;
youth **mu-tavana** (male), **mu-hiinja** (female) (F33); **mo-tava**, **mw-aana-mo-ka** (F34) G66 miɲja; E46, E74 mo-taana

The other language groups which share one word with KiiRaŋgi (F33) and KeeMbuwe (F34) are Rutara, EJ25, D25, EJ32, G35, East Ruvu, EJ44g, North Rutara, DJ60, P15, F25, DJ64, DJ65, F32, EJ45, EJ31, E74, F21c, Seuta, M10, P10, North Nyanza, E55 and G66.

Although there is a lower count of shared uniquely created vocabulary between F33 and F34, there is reason to believe that these two are related genetically, supported by native speaker intuition[48].

[48] Personal communication: Michael Kimolo (1994), Florian Kimolo (1999) and Flourine Francis (1999) on the relationship between KiiRaŋgi and KeeMbuwe with regard to KiiRaŋgi folklore's epic branching of the earlier ancestors in search of francolins (of the (continued...)

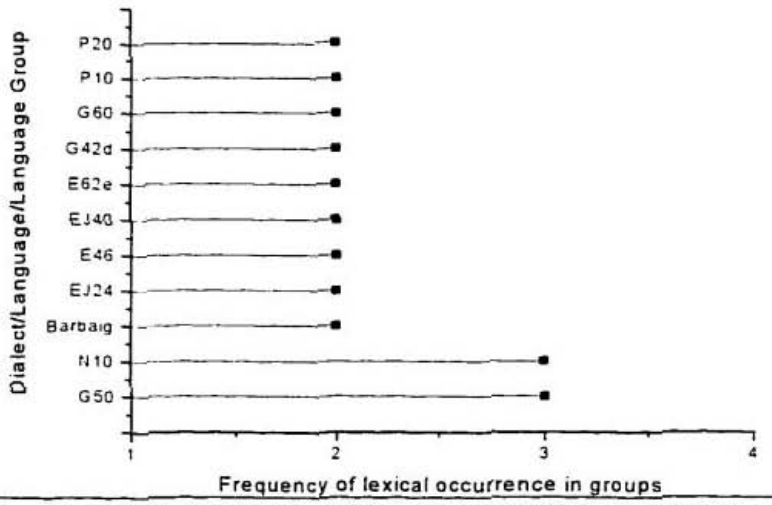


Figure 4.15 Areal frequencies between F33/F34 and other languages

The following five languages (or dialects) of Zone F, as individual languages (KeeMbuwe, KiiRaŋgi, KiLooŋgo, ɪCɪWʊʊŋgʊ, and KiBeende) display one specific lexical feature in common. Their lists of unique vocabulary which isolate them from the general stock of the Zone F group, whether invented or areal, are unusually long compared to the others. This may point to some significant difference in their historical development based on the assumption that, if languages belong in one genetically derived zone, then the difference in their individually unique vocabulary is minimal, since their ancestor would be expected to

---

[48](...continued)
Francolinus genus, related to and resembling the quails and partridges found in the Old World), *mbuuwe* or *kwale* in KiSwahili. For example, Michael Kimolo characterized the two languages as dialects which differed in speed and length of some syllables only: KiiRaŋgi faster, and KeemBuwe slower tempo.

have innovated and borrowed the same items before a split into smaller units. After they split, only a limited amount of different vocabulary is expected. A full display of lexical behaviour for the Zone F languages is summarized in *Table 4.26*.

Table 4.26 Total number of language-specific vocabulary in Zone F linguistic groups

Language (group)	*Identifying lexemes*	*Language (group)*	*Identifying lexemes*
F21b,c (-Ntuzu, -Kɪɪya)	13	NL (F21, F22, F24, F31)	4
F21a,b,c (KɪSukuma)[49]	20	NR (F21, F22, F24, F31, F32)	8
F21 + F22b (KɪSukuma2)	16	Zone F (F10, F21, F22, F23, F24, F25, F31, F32, F33, F34)	16
F22a,d,e (KɪNyamweezi)	19	F31/F32	15
F23a,b (-Siloombo, -Yoombe)	74	F24/F31/F32	1
F31a,b (-Ushoola, -ɪlaamba C)	39	F33/F34 (-Mbuwe, -iRaŋgi)	18
F24 (KɪKɪɪmbʊ)	39	F34 (KeeMbuwe)	53
SN ((KɪSukuma2 + KɪNyamweezi)	21	F33 KiiRaŋgi)	42
Ar (GiAhi, GɪRwana)	7	F23c (KiLooŋgo)	73
F31a,b,c (KɪnɪLaamba)	27	F25 (ɪCɪWʊʊŋgʊ)	79
F32 (KɪRɪmi)	53	F10 (KiBeende)	91
NM (F21, F22, F24)	4		

[49] F22c in Guthrie is Kɪya which does not belong in F22. It was shifted to F21 as F21c JinaKɪɪya. In addition F22b KɪDakama joined the F21 group because of its linguistic affinity. leaving F22a, F22d and F22e as the core KɪNyamweezi dialects.

Any isolation of dialects from their sister languages increases their distance as they innovate and borrow differently, resulting in the emergence of new, different languages with an obviously different linguistic evolution, and a heritage from a different proto language. And it is this subtle difference of innovation and contact with other languages which divides the Bantu languages into zones (geographical), languages and dialects (linguistic).

If only the highest figures of unique vocabulary are taken as a first step, then these are 91 (F10 - KiBeende), 79 (F25 - ɪCɪWʊʊŋgʊ), 74 (F23a,b - shared between SiSiloombo and SiYoombe), and 73 (F23c KiLooŋgo). Incidently, these are the same languages which did not fit properly in the lexicostatistically based linguistic tree for Zone F because of their relatively lower percentages of shared vocabulary with the rest of Zone F languages. As a second step, other high figures of interest are 53 (F34 - KeeMbuwe), 53 (F32 - KɪRɪmi) and 42 (F33 - KiiRaŋgi). As a rule of thumb, it seems true that, if a language belongs to a group, its higher count of unique vocabulary implies questionable membership in that group. In this case, the membership of KiBeende, SiSiloombo and SiYoombe, KiLooŋgo, ɪCɪWʊʊŋgʊ, KeeMbuwe and KiiRaŋgi is questionable or simply not genetic because of their higher unique stock. However, of these, KeeMbuwe and KiiRaŋgi are closest to the remaining members of Zone F because they have fewer exceptions.

On the other hand, higher counts of shared uniquely created vocabulary among two or more languages or dialects is indicative of a common history between them. In other words, when

linguistically viable groups share fewer unique innovations (whether as creations or areal words), then they are unlikely to belong to one immediate genetic tree. Their similarity may be only areal. This is best illustrated by the counts of least shared vocabulary in KIKIImbʊ, KInILaamba and KIRImi as one group, sharing only one word. That word is also found in neighbouring languages, therefore making any similarity between these three languages only areal. Another illustrative figure is 7 words shared between GiAhi and GIRwana. Since these two dialects do not form a final node in their group, then their genetic position within Zone F is not the issue here, because they are part of larger KIRImi. What the 7 words tell us is the existence of a significant relationship between the two of them as members of a larger group. When they combine with ɣIɲaMuʃiŋaʃi to form KIRImi, the number of shared vocabulary between them is 53 unique words. This is one of the highest figures indicating genetic cohesion without question.

Because of the first scenario of high numbers of unique vocabulary in single languages indicating non-membership, the following languages are not discussed. Only their vocabulary is given, as members of geographical Zone F rather than genetic Zone F.

4.2.1.2.20 Other groups: KeeMbuwe

(176) KeeMbuwe unique vocabulary (53 words)

beard **mbulo**
cattle **vi-maka**
chief **mo-suuŋgaati**
day after tomorrow **o-keeye**

dog **diyo**
doze **o-ɲaaʃa**
duck **kɪ-dako/vi-dako**
grandfather **maame**
ground (cultivated), farm **waala**
hate, detest **o-sooca**
hunt **o-loomba**
increase, make greater **o-duuma**
increase **o-swaania**
jaw (bone) **ŋ-kaasa**
jealousy **kɪ-ʃeeya, kɪ-ʃeya**
kidney **ŋ-kosaaŋkosa**
leave, go away **o-ʃereŋka**
lend, borrow **o-taaɲca**
milk **masii**
mountain **mw-eembɪ**
navel **mo-ɲoku** (F22b i-noku; F31a, F31b ɲoku; F22a i-nooŋku; F32a ɲeku; F32c ɲeeku)
new **kɪ-ʃeʃe**
penis **kɪva**
pig **ŋ-kamba**
pigeon (kind of) **ke-rukwa**
pinch, make narrow **o-dida**
pit, hole **-siimbo** derivation: < PB *-cɪmb- 'dig'
pool, pond **ki-teŋge ɲeri**
pregnancy **mo-kova**
pull, drag **oo-kurya**
return **o-taaloka**
river **mo-ʃulo**
rooster, cock **n-sesero**
run **o-ʃeeŋa**
sell **o-ta**
sheep **o-risa**
shield **gaamboda**: borrowing Iraqw gaamboot
shiver **o-siiŋgisa**
singe **o-reerya**
slaughter **-kera**
snail **ŋ-kalava**
sniff, smell out **o-nduʃa**
speak **o-loseka**
stick **mo-resa**
sweat **biro**

termite **mekese**
tomorrow **loovi**
try **weseererya**
urinate **o-sumaa** < PB *-cub- 'urinate'? (cf E55 ku-maa)
urine **ma-suma** < PB *-cuba 'urine'? (cf E55 ma-umao)
well (n) **soola**
work as a mason **o-jiʃa**
zebra **n-dako ya i-sake** 'donkey of the bush, i.e. wild donkey'

4.2.1.2.21 Other groups: KiiRaŋgi

(177) KiiRaŋgi unique vocabulary (42 words)

armpit **ki-ɲesu**
day after tomorrow **lʊvɪrɪrya**
dog **kʊri** also found in Seuta, Arusha (Ehret p.c.): loan Maasai ol-kurii
dust, cloud of dust **i-ruri** cf Iraqw/Buruŋge teri 'dust, earth' (Nurse 1979b:515)
embrace **kʊ-kwatɪrɪra**
feathers, fur **baaera** < G60 ama-gala?
finger **i-maamba**
give **kʊ-toola** cf G42d kutoa 'give, produce, remove'?
grandfather **baaba** semantic shift: < PB *-baaba 'father'
hate, detest **kʊ-sʊʊla**
hunt **kʊ-sakaata** < Barbaig ʃagata 'search for, hunt' cf PB *-cak- 'search for, chase'
increase **kʊ-mema**
jealousy **i-yɪsɪ**
knee **i-coomero** cf G60 -fugamilo?
kneel **kʊ-cwaama** < -cugama < -tugama (cf G60 -fugama 'kneel')
know **kʊ-taaŋga**
leave, go away **kʊ-roka** < G40 kutoka 'leave'?
mosquito **uno**
navel **mu-kʊfo**
outside **weerwi**
pit, hole **ɪ-duundu** (also used for 'well')
river **i-βote**
salt **saaŋgasa**
sell **kʊ-cʊlʊca** (cf F21c gʊ-sʊlʊja 'to trade')
sharp (be) **kʊ-kola**
shave **ku-kera** extension of meaning, < PB *ked- 'cut'
sheep **muundi**

sift **kʊ-cekesa** (cf gʊsegeesa 'to separate butter from milk by shaking, especially in a calabash')
snail **i-tambaala** Seuta term (Ehret p.c.)
sneeze **ku-va maaʃa**
sniff, smell out **kʊ-tahya**
spear **ŋ-kooŋgo**
thigh (human) **ra-awa/ma-awa**
thigh (animal) **kɪ-jʊmbʊlʊ**
tomcat (half-wild) **i-hulumi**
tortoise **ki-simantohe**
try **kʊ-yeva**
walk **kʊ-doma**
word **i-saare** appears in Sabaki (Ehret, p.c.)
yawn **kw-aasama** ('gape')
zebra **ɲ-jae** E46 ɲ-jage; EJ40 -ɲ-ʃaɣe/-ɲ-cage/n-zage/n-zagi/ɲ-jagi; EJ25, E52, E54b ɲ-jagi (cf Iraqw dakeet (Sg), daket (Pl)

4.2.1.2.22 Other groups: KiLooŋgo

(178) KiLooŋgo unique vocabulary (73 words)

axe **n-seeɲa**
banana (fruit) **i-hiise**
bark of a tree **i-βaaŋgwa**
beat **ku-teela** Rutara
blood **βwaamba** Rutara
borrow **ku-tiiza**
brother, relative **mu-zaale** cf PB *-biada 'cousin'
bush **i-luuŋgu**
buttocks **i-buunu**
cease, finish **ku-hwa**
chief, king **mu-kama** [Rutara], DJ64, EJ25, [EJ40] mu-kama
climb, ascend **ku-hanama**
cow **e-n-te** Rutara cf Proto Eastern Nilotic *-kɪtɛŋ 'cow'? (Ehret 1971)
coward **mu-tiini** derivation PB *-tɪɪn- 'fear, run away'
crocodile **e-nsaambi** (F23b nsaambi)
darkness **e-n-ziimbazi**
daytime **i-haaŋgwe**
deny **kw-aaŋga** Rutara

do **ku-zila**
finger **lu-kumu** General Great Lakes term
fly (house) **e-n-sohela** cf F21c sohela 'small, blood-sucking flies which pester cows'
grandmother **kaaka** Restriction of meaning, < **PB** *-kaaka 'grandparent'
great, powerful, big **-haaŋgo** found in Rutara
ground (cultivated) **e-n-saambo**
hair **i-soke** appears in Rutara
hide **ku-seleka** Rutara
husband **iβa** (F10 iβa)
intoxicated (get) **ku-tamiila**
jaw (bone) **eemba**
lamp **e-ŋ-kaanzi**
lean (become); grow thin **kw-aanuka**
leopard **e-n-zumula**
lie down **ku-lyaama** Rutara
lion **e-ŋ-gaanza** Rutara
maize **i-po**
male **i-seeza/ma-seeza** Great Lakes
medicine, remedy **mu-βazi**
mother **maaha**
neck **bica** Rutara
night **cilo** Rutara -kilo/-cilo
path **mhaanda** Rutara
pig **ee-m-punu** Rutara
porridge (stiff) **o-βulo**
press out (oil seed, sugar cane) **ku-kaanza** cf F21c -kaanza 'extract, usually seeds, from a plant/fruit like a cucumber'
quarrel **kwi-izumagula**
rat **mu-dolo**
rhinoceros **ee-ŋ-kula** Rutara
river **mu-nona** (cf F21c ɲnona 'ravine, especially with fast flowing water'
seed **mbɪβo** cf F21c -βɪβa 'plant seeds by throwing and scattering'
sister, (his/her) **mu-ɲaaɲa**
slander, accuse falsely, often secretly **ku-βeehela**
slaughter **ku-βaaga** (F23b ku-βaaga; F21c gʊ-βaaga 'to flay an animal')
sleep **ku-lyama** Rutara
smoke **mu-hiliŋka**
snail **e-ɲooŋga**
strength, power **maani** (cf G42d manii 'sperm'?)
stutter **ku-titihaza**
sweat **e-mpiita** (F10 kafiita)

tears **ma-lila** derivation< PB *-dɪd- `cry'
think, imagine **ku-teekuza**
thirst **i-liho**
tick (of cattle or dog) **ee-m-balaβala**
tomcat (half-wild) **mu-goomba**
tomorrow **ɲeeʃɲca** Rutara
urine **ee-ŋkali** Rutara
vomit **ku-tanaka** Rutara
walk (take a) **ku-tuumbagila**
wash (hands) **ku-naaβa** cf G42d -nawa `wash hands'
whistling **lu-culizo**
who **oha**
yawn **kw-iyayamula**
young man **mu-sigazi** Rutara
zebra **ee-n-tulege**

4.2.1.2.23 Other groups: ɪC'ɪWʊʊŋgʊ

(179) ɪCɪWʊʊŋgʊ (79 words)

ashes **i-twiitwi**
ask for **kʊ-leeŋga**
arrow **ʊ-n-dʊʊnda**
banana **-dizi** cf G42d n-dizi `banana'
bathe **kʊ-cɪɪnda**
beautiful **i-noonu** extension of meaning, PB *-non- `became fat', cf F21 -nonu `sweet'
bite **kʊ-wawa**
blood **ʊ-laanda**
charm (especially to ensure wife's fidelity) (n) **i-nuumbo**
chief, king **mweene**
cloud **i-kʊʊmbɪ**
cobra **ɪ-hoogo**
courtyard **i-saala**
crawl, creep **kʊ-sala**
crocodile **ɪ-n-doolo**
day after tomorrow **isikwɪɪʃɲje**

defecate **kʊ-kʊ-ʃa** (kʊ- insertion and double infinitive[50]: why?)
do **kʊ-looŋga**
dwell **kʊ-kw-iikala** (double infinitive?)
face downwards **kʊ-kw-ɪnama** (double infinitive?)
father-in-law mother-in-law **kayeemba**
fence, enclosure **lʊ-waya**
finger **kaa-ŋ-kono** derivation using diminutive ka-: < PB *-kono 'hand, arm'
fingernail **i-nIIŋgwa**
fly (house) **i-saŋgaazi**
foam **i-povu** (of soap): borrowing to enrich language, since **ifuulo** < PB *-pudo is for the rest of other types of foams.
food supply for a journey **ɪ-n-sʊʊma** (cf F21c -fuma/-suma 'obtain/buy food, usually from a distant place after a shortage or famine in one's house')
fully developed (be) **kʊ-kw-eeɲjʊka** (double infinitive?)
go **kʊ-waala**
grass, reeds **i-sote/ma-sote**
grind coarsely **kʊ-sigina** (cf F21c -ʃigina 'grind finely and thoroughly')
ground (cultivated) **caalo** (cf F21c caalo 'village, land, district country')
heavy, serious, dull **i-kopaavu**
hundred **ɪ-mya** (F24b, F33, G42d mia 'hundred')
ill (be), groan **kʊ-wIIna**
itch **kʊ-ɲegela** (cf F24b kuɲegela; F33 kʊɲeera; F34, E74 and some others oɲeera)
kill **kʊ-komaaŋga** extension of meaning, < PB *-kom- 'hit with a hammer'
kneel **kʊ-laamba**
knife **ʊ-m-pyaano** 'knife used by men only' (cisu 'knife for women')
lake, pool, pond **ʊ-lʊ-kʊwa**
lean (become); grow thin **kʊ-topa**
leg, foot **ɪ-cɪnama** < PB *-yama 'meat'? Corridor
lick (vt) **kʊ-myaanda**
lie on one's back **kʊ-kw-anzɪka** (double infinitive?)
light, sky **ɪ-kʊʊmbɪ**
lion **ɪ-saama** Corridor
listen **kʊ-kw-IIvIkIʃa** (double infinitive?)
look around **kʊ-vwaamba**
louse **ɪ-sʊʊmɪ**
maize **i-saka/a-ma-saka** (F10 sisaka/fisaka)

---

[50] The addition of kʊ- is counted as one innovation only, and the cases mentioned only illustrate the phenomenon in the language. Most of the words are inherited from Proto Bantu. F31 and F32 do that to a limited degree (Nurse, p.c).

medicine **ɪ-kwɪ** (cf tree **ɪ-kwɪ**, < PB *-kʊɪ 'firewood')
monkey **ɪ-m-bwaaji**
mould pottery **kʊ-maata**, (also elsewhere in east Africa)
navel **kɪ-pwawaambwe**
open mouth wide, yawn **kʊ-kw-asama** (double infinitive?)
pot, vessel **ɪ-cɪ-ɪndʊ/ ɪ-vi-indʊ**
protect by charm (medicine) **kʊ-tema**
quarrel **kʊ-ku-dwa** (double infinitive?)
quiet (be) **kʊ-kw-iinala** (double infinitive?)
river **ʊ-m-baana**
root **i-kwaazo**
scorpion **ɪ-ŋ-goʃa**
search for **kʊ-vwaamba**
seize **kʊ-lema**
sell **kʊ-kaja**
set (of the sun) **kw-iila** /g/ loss, (cf F24b kʊ-gw-ɪɪla; F31a w-eela; F31b -iila; F33 kw-iira; F34 o-w-era, F21c gw-ɪlă; (cf F21, F22a -gwa < PB -gu- 'fall')
shame, disgrace **yaazi**
shave **kʊ-seeʃa**
sick **mbɪɪnu**
skin (of person) **ɪ-ŋ-gweembe**
soot **a-ma-twiitwi** (cf itwiiti 'ashes')
speak **kʊ-tela**
spear **ʊ-n-dʊʊnda**
spread **kʊ-kw-aala** (double infinitive?)
spread abroad (be), become generally known **kʊ-kw-eenela** (double infinitive?)
stick **soomi**
take, carry **kʊ-seenda**
taste **kʊ-myaanda**
thigh (human animal) **lʊ-paamba/ɪ-m-baamba**
tie, fasten **kʊ-ʃepa**
tomcat (half-wild) **i-waka**
tree **i-kwi**
try **kʊ-paaja**
walk **kʊ-wala**
wall **ʊ-lʊ-wʊʊmba**
wash, take a bath **kʊ-ciinda**
wet (get) **kʊ-kolowa** (double infinitive?)
wind **ʊ-mweya** (cf F21 ʃaga (< mu-yaga), Rutara mu-yaga 'wind' and *g loss in F25
withhold from **kʊ-kw-iima** (double infinitive?)

F25 has some affinity with F33 and F34 in losing *g unless it is pre-nasalized as in -lowa (F25/F33), -lova (F34) < *-dog- 'bewitch' and ɪŋgaaŋga (F25), ŋkaaŋga (F33, F34) < *-kaŋga 'guinea fowl'

4.2.1.2.24 Other groups: KiBende

(180) KiBende unique vocabulary (91 words)

accustomed (get) **ku-beelela**
animal **i-ʃweele**
ashes **i-fuundu/ma-fuundu** (F22a matuunde)
ask for **ku-seeɣa**
baboon, monkey **i-jaanda/ma-jaanda**
base of tree-trunk **i-siindo**
bathe, wash hands **ku-ʃaaɣa**
beads **βu-kasi** (< PB *-kadi 'female'?)
bite **ku-teta**
blood **malaso** < PB *-ɬac 'to shoot with arrow'
body **si-taambo/fi-taambo**
brother, relative **wa muɣana**
build **ku-juβaka** cf PB *-bak- 'build'
bush **i-siɣo**
calabash **lu-siiŋgi/n-siiŋgi**
chest **i-tuundu**
cloud **i-kuusi/ma-kuusi**
count **ku-paanda**
cover **ku-fiimbila**
day **lwiisye** (F21c lwɪsɪ used mainly in lwɪsɪ lweene 'that day') (< *-yɪcɪ 'day, daylight, found mainly in Zones A, B, C?)
day after tomorrow before yesterday **lwiisye luundi**
deny, refuse, say no **ku-tuna**
dig **ku-saβa**
district, province, country **si-huɣo**
dry (vt), set out to dry **ku-ɣ-anika** (morphological innovation or retention of earlier PB form, like in F25, by adding a syllable in verbs, the infinitive kʊ-?)

dust, cloud of dust **lu-fuundu/ma-fuundu** (cf ifuundu/mafuundu 'ashes', difference of class marker to show difference)
feathers **ma-fuumbu**
fill **ku-buumba**
fish **i-seembe/ma-seembe**
frog **ka-saβa**
goat (he) **li-kaβooloβoolo** ('the strutter of its testicles/penis'): lexical extension < PB *-bodo 'penis'
grass **ma-βano**
ground (cultivated) **i-βala**
gruel, light porridge **m-pana**
hair (white, grey) **ŋ-kote**
hand (right) **kweene**
heart **mweeɣo**
heavy, serious, dull **i-ʃwaamu**
hill, mountain **mu-sosi/mi-sosi** Common Great Lakes, loan from Nilo-Saharan, diagnostic term of Great Lakes subgroup (Schoenbrun 1997; Ehret p.c.)
hold, arrest **ku-niɣa**
hyena **i-tana**
kill **kw-ihaaɣa** (D28 -ɪhaga)
king **mw-aami** cf DJ60 mw-aami 'chief, king'
leak, ooze **ku-sooβa**
lend borrow **ku-tiila**
look after grazing cattle **ku-kema**
love, want **ku-ʃomwa**
lung **i-poombo/ma-poombo** (<PB *-pʊʊpʊ 'wind'?)
maize **si-saka/ʧi-saka** (ɲsaka/masaka 'millet' < PB *-caka 'bush'?) (D28 -saka; F25 isaka/masaka 'maize')
migrate **kʊ-tʊlʊʊka** (7V?)
mosquito **ka-laamba/tu-laamba**
navel **mu-ʃoʃo/mi-ʃoʃo**
pack, flock, group **mu-leɣa**
pipe **i-kuuŋka/mi-kuuŋka**
pot, vessel; earthern cooking pot **ŋ-kono**
pour away **ku-ɣona**
protect by charm (medicine) **ku-liisiimpa, ku-siimpa**
pull **ku-bwiita**
quarrel **ku-soola** (F22d -soola; EJ16 kusola)
rest, take a holiday **ku-tamuka**
return **ku-heleela**
run **ku-kilima**

seize **ku-ɲiɣa**
seven **dwi**
sew **ku-laanda**
sharpen **ku-tyasya**
short **-tofu**
skin rind (of fruit) **i-papa**
sneeze **ku-tisila**
speak **ku-teenda**
spit **ku-tema**
spoil **ku-ɣonona**
spread **ku-ganika, ku-ɣaansa** innovation or retention of -ga-?
star **lu-taaŋgwa/n-taaŋgwa** < PB *-taŋgʊa 'sun' (Zones H, L, K, R)
stick **i-ntuβa**
strength, power **manaɣa**
stumble **ku-kuuntuka**
sweat **kafita** (F23c)
sweet **-lyoohile**
thicket **i-huumpu**
thigh (human animal) **i-taamba/ma-taamba**
thirst **ŋ-kaaŋgu** (cf F21c jilaaŋgʊ 'desire (thirst) for things one does not deserve')
tie, fasten **ku-haamba, ku-haambilila**
tomorrow yesterday **isoneka**
try **ku-liiŋgisya**
walk (take a) **ku-lyaata**
wall **lu-mato** (cf F21c -mata 'plaster by throwing from a distance, usually watery mud)
war **masoola**
wet (get) **ku-ɲaaɲa**
wind **musaɣa**
work (n) **musika**

4.2.1.3 Contribution of non-Bantu languages to Zone F

In the following examples of shared vocabulary, there are clear-cut cases of borrowing from and to either direction, on the one hand, and the obscure ones on the other (for a fuller treatment of Cushitic and Nilotic loans in Bantu languages, see Ehret 1971, 1980; Nurse 1979b; for Arabic loans, see Bosha 1993)

4.2.1.3.1 Contributions of non-Bantu languages: Iraqw

The three words below are from Bantu without any doubt, and their significance lies in the obvious fact that speakers of different languages have always interacted with their neighbours, borrowing words from each other in the process. The number of words borrowed depend on the perceived gaps and reasons for borrowing by the recipient languages' speakers. When only oral history is available, in cases like Bantu where speakers of different languages from language families have interacted for millennia, tracing the sources of those words becomes difficult.

(181)

bed **ki-taara** loan, PB *-tada 'platform'
bottle **-cupa**, loan, KiSwahili -cupa
sword **-paŋga**, loan, KiSwahili -paŋga

It is difficult to decide whether the following words are native to Iraqw, loans from the languages listed after them, or from sources other than those shown:

(182)

grass for cattle **manongi** (f) **manonga** (f) F21c *ma-nooŋga* 'name of river, meaning 'shells''. The river divides Tabora and Shinyanga regions and its valley empties its water in the Wembere swamp. Cattle graze in the valley and drink from the river.
hare **kwa?angw** (m), **kwa?eeri** (n) F21c *ŋwana-kaaŋwa* 'hare, mainly used in personifications in folklore'; also a female proper name *kaaŋwa*, with the whole name for the 'hare' meaning 'son of Kaaŋwa'. Is it a loan from Iraqw?

The following group of words are borrowed by the Bantu languages. However, for some like 'maternal uncle', 'pestle' the direction of borrowing is indeterminate, since Southern Cushitic might have borrowed from Bantu. Many of the examples from JinaKIIya are compared mainly with Iraqw vocabulary by Mous (1993) and Maghway (1995):

(183)

beans **loositoʃo** (f) **loosi** (f) F34 loosi
bull, biggest in herd **sidiimé** NSgfi **sidiimedu?** Pln F21c ʃadiimá 'biggest bull in herd'
darkness **giwti** NCfi F21 giiti, F24 kiiti 'darkness' (cf PB *-kiit- 'screen')
kid, lamb **deel(a)moo** NSgfi[51], **deeláy** Plm F21c ndɪlaaṇa 'infant calf'
maternal uncle **maamay** (m) **maami?i** (n) F21 maami 'uncle (who is by definition, maternal)'
This word in KISukuma can be posited to have come from two Proto Bantu words *maa(ma)* 'mother' and *-dʊmi* 'male, man' to form the compound *maa(ma)-dʊmi* 'male mother' or 'brother of my mother'. In oRuHaya, the second stage before a portmanteau stage is reached is relevant: *marumi* 'maternal uncle'. This word is very similar in context and meaning to 'aunt', which in Bantu refers to father's sister only. In KISukuma, as in many of the Bantu languages surveyed, it is composed of two words: *seeŋgi* < *-ce* '(his) father' and *-ke*[52] 'wife (female)', becoming 'female father' or 'female person born of same parents as my father'. The other zones in Eastern Africa indicate that the concept is widely distributed, since many members in E, EJ, G, M, N, and P also use a two-word compound to represent 'aunt', as in oLuNyaŋkole which better represents this concept of referring exclusively to father's sister: *iʃe* '(his) father' and *ŋ-kazi* 'female', becoming *iʃeŋkazi* 'paternal aunt' (cf KiSwahili *shangazi* 'aunt'. Because of this likelihood of Bantu origin, both the JinaKIIya *maami* and *seeŋgi* are suspicious as original Nilotic words. Since JinaKIIya does not have *-lumi* for 'male, and instead has *-lume*, it might be a loan from EJ20 or EJ40 where that shape is found. For instance, as an analogy from *maamay*, it is unlikely that the following reconstruction for Proto Southern Nilotic is correct: *sɛ(ɛ)ŋkɛ* 'paternal aunt' (Rottland

---

[51] Abbreviations used by Maghway (1995:211) in describing Iraqw. Some like N 'noun' are universal, while others like *fi* or *fii* are language-specific: N = noun; Sg = Singular; fi = first feminine subcategory; fii = second feminine subcategory; Pl = plural; m = masculine; NC = non-count noun; n = neuter

[52] *seeŋgi* can also be posited in KISukuma as *-ce '(his) father' and *-ŋgi 'other', to mean 'another kind of father'.

1989:221), or even Iraqw *eŋga* 'father's sister' < Proto Southern Cushitic *ʔaŋ- 'father's sister' (Ehret 1980:288).
pestle, mortar stick **musa** (m), **muse** (f) cf PB *-yɪncɪ 'pestle', F21c ŋwɪɪsɪ
piece of soil with grass **kinti** (f), **kinta** (f) F21c ɪkiindo 'dry clod of earth'
pole (for shutting cattle enclosure) **kaangarmo** (m), **kaangara** (f) F21c βʊ-kaaŋgala 'short poles cut to fit the width of a bed used as a mesh onto which a cow skin or other skins can be spread, for sleeping purposes'
leather bag (on donkey) **mayʃoodu** F21c ʃʊʊda/mi-ʃʊʊda 'leather bag'
male animal **yaqaamba** Zone F and some other central Tanzania Bantu languages 'bull'
seat, chair, place to sit **kitaaŋw** NSgm **kiteeriʔ** Pln F31 and some other Bantu languages kɪteeŋgʊ 'seat, chair'
side dish **naanu** F21c nani 'relish, which can be from plants (all kinds of vegetables) or animals (all types of meat) as a regular, complementary accompaniment to a main food made from grain'
sunset, evening **tsiindi** NSgfi **tsiindoo** Pln F21 m̥ɪɪndɪ 'evening'
sweet potatoes **kasiitoʃo** (f) **kasiis** (f) F23 -ziizi 'sweet potato' (cf KiSwahili kiazi).

4.2.1.3.2 Contributions of non-Bantu languages: Barbaig[53]

The loan words in Bantu languages from the list below are Barbaig, and some Bantu language varieties like JinaKɪɪya have borrowed them. Those from Cushitic in Barbaig might have been borrowed by the Bantu languages either directly from Cushitic, or indirectly from Barbaig, as in the case of *losi* 'beans', from Cushitic, which might have been borrowed by KiiRaŋgi from Barbaig because of its shape, rather than the Iraqw loositoʃo (f) or loosi (f). Most of these loan words retain their morphology without being assigned to the Bantu noun class system, as most of the examples below show.

(184)

calf of leg **hawda** cf saluta/saluda in KɪKɪɪmbʊ, KɪSukuma and KɪNyamweezi?

[53] From Nurse's 1972 unpublished field notes collection.

calf of cow **mayd** (sg), **muhog** (pl) F21c mʊʊga 'heifer'
cow **ded**(sg), **dug** (pl) F21c dɪɪda 'old female cow'
dust **biŋjand** F21c guʃaanda 'powder, mainly medicinal'
horse **diged Ulay** 'European donkey' , *Ulay* from KiSwahili, *Ulaya* 'Europe'
hump **hukta** KɪSukuma and KɪNyamweezi lʊguku < Proto Southern Nilotic *yuuk (*yu:k) (Ehret 1971:96) 'cow's hump'
hunt **ʃagata** E46, E62d (and E60 generally), F33, Hadza, loan from Cushitic, as in Iraqw tagaadu; Alagwa ɬakaat; Buruŋge ɬaakat
look after grazing cattle **adabiw** F21c gʊ-labiila 'look after grazing cattle for another for a short period before the substantive herder takes over'
migrate, move away **balag** F21c lʊ-baga 'temporal, grazing camp obtained after migrating from the usual place of domicile'
mother **iya** F21b iya 'mother'
pot, vessel **dahuda** F21c -dahʊla 'scoop and serve, mainly relish, from a cooking pot to a smaller, serving bowl/vessel'
shield **igambod** F34 **gaamboda:** borrowing < Barbaig (Iraqw gamboot also borrowed from Datoog)
tail **ʃumŋand** F21c sɪɪŋwaanda 'bushy, bull's tail-end used for dances and ritual'
tortoise **gumald** F21c gulumaadi 'tortoise'

Because of their shape, the words below are borrowed from Bantu, with Barbaig affixes attached to the Bantu roots:

(185)

hoe **magemʃand** (sg), **magembojig** (pl) PB *-gembe 'hoe'
spoon **matiŋgod** PB *-yiko 'spoon'
bed **bulalida** PB *-daad- 'sleep' cf -dɪdɪ 'bed'

On the other hand, the following words are most likely borrowed through KiSwahili generally. Some of them are from other Bantu languages other than KiSwahili, with their origin in Proto Bantu:

(186) Possible Bantu loans in Barbaig

bottle **cupajand** (sg), **cupajeg** (pl) G42d cupa 'bottle'
bread **mkat** G42d mkate 'loaf of bread'

chief **mtamid** F21, F22, F24, G42d m-temi 'chief'
examine **apima** G42d -pima 'measure'
fish **samak** G42 samaki 'fish' < Arabic samak 'fish'
highway **balbala** G42d barabara 'road'
hook (for fishing) **ndoan** G42 ndoana 'hook'
hunger **jalod** PB *-jada 'hunger'
lime, whitewash **cokaa** G42d cokaa 'lime, whitewash' < English 'chalk'
pay **alipana, gilipanda** G42 -lipa < PB *-dɪp- 'pay'
pot (metal) **kopajanda** (sg), **kopajega** (pl) G42 kopo 'small tin' < Portuguese copo 'cup'
pump **bomba** G42 bomba 'pump, water tap' < English 'pump'
razor **wemb** G42d wembe 'razor blade'
read **kisomand** G42d -soma 'read'
salt **muʃod** PB *-muʃu
size, measure **gipim** G42d kipimo 'size, measure'
spring, machine **maʃineda haw** G42 mashine < English 'machine'
sword **paŋga** G42d paŋga 'matchet'
teach, instruct **go-fundiʃ** G42d ku-fundisha < (cf F21c regular infinitive gʊ-)
tomato ʃaʃ G42d ʃaʃa
town **muji** G42d mji
whiteman **msuŋgajanda** G42d mzungu 'European'

While some of the above words were relatively easy to trace, the following show some close affinity to Bantu morphologically, although they show up as Barbaig.

(187) Possible loans in Barbaig from Bantu and other obscure/unknown sources

be, become **huwa** cf PB *-ba
boat, canoe **malambod** cf F21/F22/F24/F31/F32 -lambo; EJ25b -rambo 'pool, pond'
cat **nyawud** onomatopoeic, as in most Bantu languages
fierce, sharp **ŋanipa** cf PB *-kadɪp- 'be sharp'
filth **madakalgajega** cf F22e, F23a,b ma-takala; F23c bi-takala; F24 n-taxalala; cf F31a ma-lagala; G65 a-ma-kakala; G61 a-ma-xaxala PB *-taka 'soil'
grate, scrape **far, fara** cf PB *-pad- 'scrape'
gun **mundischand** cf F22 F24 mudʊji; F25 ɪ-mʊdʊʊsi; F10 munduusi; F22e mundʊʊzi; F31a mudʊʊzi
mourning **ʃoka** cf F31 sʊka 'mourning'
old times, the past **garrai** cf PB *-kale

pestle **mosida** cf PB *-yɪncɪ
seven **isba** < Proto Southern Nilotic *tisap, a loan from Eastern Cushitic *tizzb- (Ehret 1971) (cf Arabic sabaa(t) 'seven').
sound, cry **ʃokjand** cf F31 sʊka 'mourning'

From the foregoing lists, the vocabulary from Iraqw and Barbaig indicates that some words can be traced quite easily, while for others it is difficult to know whether their origin is Bantu or non-Bantu because they are claimed by both as native, as in the case of 'sheep' which is Proto Bantu *-kodo and may have some bearing with the Central Sudanic *-(k)ondri, although *-kolo had not been traced to any non-Bantu source (Ehret 1968:217). With the passage of time and collection of more data however, some of the words can be ascertained, as is the case with *kodo and *-kondri (Ehret 2001, p.c.). For some, tracing their origins remains illusive. This goes to show that proto languages can be multi-genetic (for a discussion of the impact of the nature and length of contact on loan words, see Thomason and Kaufman (1988))

4.2.2 Conclusions: Lexical status of Zone F members from qualitative evidence

The data and discussions of qualitative evidence in KɪSukuma, KɪNyamweezi and SiSuumbwa, on the one hand, and other Zone F languages on the other, reveal the following general, tentative conclusions:

(1) The dialects as concrete linguistic units smaller than languages are true historical representations of differentiation due to linguistic splits. If they are dialects, they normally

share the highest number of words within a language and they can be represented in a linguistic tree as one node. They can thus be posited as genetically related at that micro level to form the languages we know. Beyond that, uncertainties abound. This is true of the KɪSukuma group, where KɪmunaSukuma, GɪnaNtuzu and JinaKɪɪya form a coherent group as one would expect. For KɪNyamweezi, KɪDakama behaves more like a dialect of KɪSukuma in significant ways, leaving only KɪNyanyeembe, KɪKonooŋgo and SiGalagaanza in the KɪNyamweezi group. In SiSuumbwa, SiSiloombo and SiYoombe unite genetically, while KiLooŋgo departs from the two in important ways. Lexically, the historical affiliation of F23a,b (SiSiloombo and SiYoombe) with neighbouring languages is difficult to ascertain precisely, especially between DJ60 and EJ20, as the above graphs show, while F23c's (KiLooŋgo's) affiliation is clear: it does not belong in Zone DJ60. It is a member of EJ20 or Rutara generally. Internal dialectal unity is also solid in the separate KɪnILaamba, KɪRɪmi and KɪKɪɪmbʊ groups.

On the other hand, ɪCɪWʊʊŋgʊ, KiiRaŋgi, KeeMbuwe and KiBende each form a group of its own because their innovations are quite different from the rest of Zone F languages, indicated also by the relatively lower shared lexical percentages. Because of forming their own groups, analysis does not proceed any farther as an indication that they do not immediately belong to the larger group, and therefore their analysis deserves a different project altogether.

For the remaining languages in Zone F, namely F21, F22, F24, F31 and F32, it is true that as one goes higher up in the linguistic tree, incorporating more dialects and then languages, the internal relationship of the expanding groups begins to be clearly due to geographical proximity since unity becomes progressively weaker and essentially areal.

For instance, F21/F22/F23 is not a historically valid group because F23 does not belong there, lexically. F23 belongs to either EJ20 or DJ60. On the other hand, F21 and F22 share many lexical innovations, both unique creations and areal, making it a better group historically, although it is difficult to say whether they are dialects of one language as Nurse (1999:10) suggests, most probably quoting conventional wisdom. Some significant differences exist language-internally, as shown by their unique creations and areal vocabulary configurations, as elaborated below. Such configurational differences between F23 and F21/F22 suggest a different genesis, since geographical proximity or distance of related languages does not significantly erode genetic affiliation. This is strongly supported by the case of F23c (KiLoonggo) which has maintained its genetic affiliation with EJ20 despite being engulfed by F21. Physical separation of dialects or languages does not therefore significantly affect their former historical path even at their lexical level, although the evolutionary path is normally clearer phonologically.

As to genetic similarity between F21 and F22, two possibilities can be advanced: first, either the languages were one initially, and an earlier divergence differentiated them as separate

languages, although the speakers maintained contact by being resident in contiguous spaces; second, though descended from the same Proto Bantu, they might have been different languages which, by convergence, were made more similar by contact. Nurse and Philippson (1980:38-9) describe both the long and short range mutual influence between speakers of neighbouring languages where even languages from different families display some lexical similarities.

(2) There is fuzziness of affiliation at higher levels in the linguistic tree (See *Figure 4.16* below). Three nodes shed some important light on the lexical status of Zone F, the highest node in our discussion. These three nodes are NM formed by three languages (F21 (KISukuma), F22 (KINyamweezi) and F24 (KIKIImbʊ)); node NL, composed of F21, F22, F24, with the addition of F31 (KInILaamba)); and node NR, which includes the preceding group, NL, (F21, F22, F24, F31) with the addition of F32 (KIRImi).

The members of node NM, that is, F21 (KISukuma), and, F22 (KINyamweezi), F24 (KIKIImbʊ) do not share a single unique lexical creation as a diagnostic innovation out of the 4 possibilities identified, indicating that their unity is not necessarily genetic. The linguistic tree in *Figure 4.16* implies that they descended from only one node up the tree, an assumption which is not supported by lexical innovation. Likewise, the members of node NL (F21, F22, F24, F31) do not share any unique lexical innovation apart from areal vocabulary. On the other hand, Zone F displays three shared innovations only out of the 17 identified,

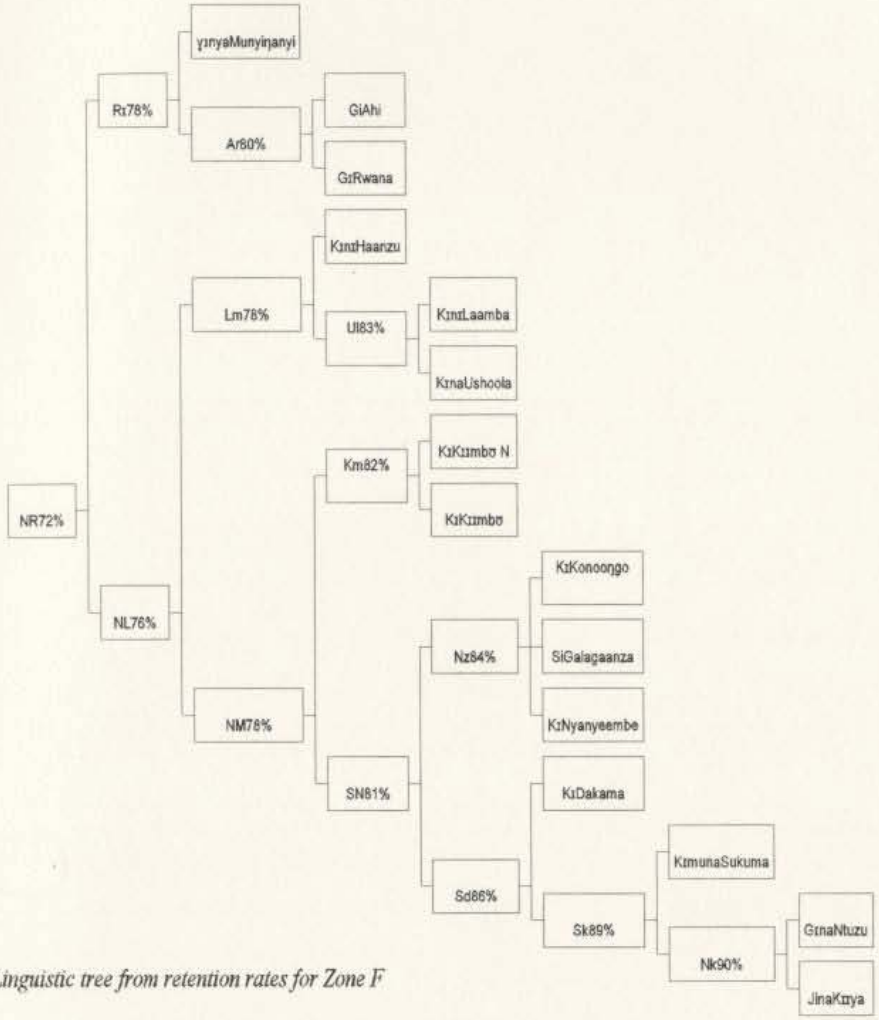


Figure 4.16 Linguistic tree from retention rates for Zone F

although even with these three, only one seems to be properly unique. Unfortunately, even this one word has a problem: an important member, F24b does not share that word, suggesting that the innovation might have started at one point and simply spread to the rest.

This is illustrated in *Table 4.27*. In this table, unique lexical inventions and areal vocabulary counts are compared. Within any one group, fewer or zero shared innovations imply an

automatic weak or absent genetic relationship with a larger group (e.g. Zone F) into which they purport to belong.

Table 4.27 Lexical innovation in Zone F and genetic affiliation

Linguistic node and % of shared vocabulary	*Words innovated in Zone F*				
	Total # of words	*# of Unique creations*	*% of Unique creations*	*# of Areal vocabulary*	*% of areal vocabulary*
F21b,c 90%	14	4	29	10	71
F21 89%	13	4	31	9	69
F21/F22b 86%	14	3	21	13	79
F22a,d,e 84%	24	3	12.5	16	87.5
F23a,b 84%	74	11	15	63	85
F31a,b 83%	31	13	42	18	58
F24 82%	39	13	33	26	67
SN (F21/F22) 81%	21	5	24	16	76
Ar (F32a,b) 80%	7	3	43	4	57
F31a,b,c 78%	25	10	40	15	60
F32 78%	49	10	20	39	80
NM (F21/22/24) 78%	4	0	0	4	100*
NL (F21/22/24/31) 76%	4	3?	75?	1	25?*
NR (F21/22/24/31 /32) 72%	7	0	0	7	100*
Zone F	16	1?	6?	18	94

Two interpretations can be advanced here: firstly, such high percentages may indicate dialects or languages which are internally less cohesive genetically because of dominant external

lexical interference or because of unrelated dialects or languages converging into one unit, as in the case of NM (F21 (KISukuma), F22 (KINyamweezi) and F24 (KIKIImbʊ); NL (F21, F22, F24, and F31 (KInILaamba)); NR, (F21, F22, F24, F31and F32 (KIRImi); or Zone F.

Secondly, the group may be genetically valid and cohesive internally but with heavy interference from other languages in the past as the cases of F22a/F22d/F22e, F23a/F23b and F33/F34[54] seem to suggest. F24 also shows this interference by having more shared than unique vocabulary.

This high percentage of shared areal vocabulary is best illustrated by KINyamweezi (F22a, F22d, F22e) (87.5%), SiSuumbwa (F23a,b) (85%), KIRImi (80%) and KISukuma2 (F21, F22b) (79%) as examples of heavy interference, where the sources of that interference make tracing their history extremely difficult. The four examples, especially SiSuumbwa, are relevant because of the relatively large sample of Zone F-unique words identified, at a total of 76 words, where only 12 or 16% of them are unique creations. At level NR (F21, F22, F24, F31, F32), unique creation is 0%, suggesting weak or dubious genetic affiliation by this predominance of areal vocabulary, rendering the historicity of Zone F itself highly questionable, as it has an areal count of 15 words (or 94%) against 1 (6%) of unique inventions. On the other hand, NL (F21, F22, F24, F31) with a unique vocabulary count of

---

[54] The shared areal vocabulary of these two is 83% as shown in *Table 4.29*, which is less than 87%, indicating reasonable internal cohesion, although the languages are also significantly different because of heavy interference.

3 out 4, and 1 areal word suggests borrowing, since such an inconsistent display may be due to the small sample of words found (4 of them), where chance can play a bigger role than in a larger sample.

(3). The Zone F languages show more lexical affinity to outside groups than among themselves. This externally favourable relation is extracted from the highest cases of shared vocabulary appearing in the different groups in the graphs above. For instance, as summarized in *Table 4.28*, individually, traditional KISukuma (F21) and KINyamweezi proper (F22a, F22d, F22e) do not seem to be immediately related to each other because KINyamweezi does not share significant vocabulary with Thagicu, while KISukuma does. When KIDakama extends a bridge between KISukuma and KINyamweezi to form one group, then Thagicu (Thagicu - Central Kenya languages like KiKamba and GIkʊyʊ) disappears . But also, Thagicu shares vocabulary to a large extent with only F32, and not with F23, F24, or F31. This suggests strongly that the development of these languages before the speakers settled in their current geographical locations was not from one parent. Where only a few Thagicu traces are found, it is likely that it is the effect of inter-dialectal borrowing, which tends to spread the words from one source to surrounding neighbours. There is also a suggestion that the lexical connection between F21 and E50 (Thagicu) is historically valid, given the possibility that the area currently occupied by non-Bantu speakers like Maasai was once occupied by the Bantu. The intervention by the non-Bantu cut off the geographical continuity, leaving linguistic islands, as Nurse (1999:4) muses about the connection.

On the other hand, three groups of languages show a widespread pattern of interaction with Zone F languages. These are Ruvu (G30), East Nyanza (EJ40) and Corridor (M10/20). Vocabulary which was not inherited from Proto Bantu and which was unique for a group within Zone F suggested mainly two processes: unique creation or areal occurrence. Widespread G30 or Ruvu vocabulary was shared by the following clusters: KISukuma2, KIRIMI (F32), core KINILaamba (F31a and F31b which excludes F31c (KINIHaanzu)). Those not well represented were KINyamweezi proper (F22a,d,e), SiSuumbwa, as well as the SN (F21/F22), NM (F21/F22/F24) and NR (F21/F22/F24/F31/F32) combinations. Since these combinations are subsets of Zone F, two important points are suggested. First, the NM and NR groupings are not historically valid, since their individual languages have G30 vocabulary. If the speakers of those proto groups acquired those words as a single group before splintering into speakers of several languages, then the words would show up even in the larger, earlier groupings. Second, Ruvu (G30) vocabulary was acquired by the speakers of each individual language after the earlier groups had already split. Scenario two is unlikely, since it would require a larger agent for spreading those words. The first point suggests a plausible possibility that some of the G30 and F20/30 languages emerged from the same ancestor before they split, like the "Kati" suggested by Ehret (1994).

Such a scenario may well apply to EJ40 which shares vocabulary with all levels of KISukuma, F21/F22, F31, F32, F21/F22/F24 (NM), F21/F22/F24/F31/F32 (NR) and Zone F generally. The interesting part however is that EJ40 is not shared with F24, F22 and core F31, indicating that the larger units beyond the language acquired the words through inter-dialectal

borrowing rather than from immediate genetic heritage. Likewise, M10/20 words are found in F21, F22, F21/F22, F24, F31 and F32. On the other hand, as larger units, NM (F21/F22/F24) and NR (F21/F22/F24/F31/F32) as groups do not feature M10/20, indicating that the vocabulary is areal rather than genetic.

Table 4.28 Shared vocabulary between Zone F members and other languages

Linguistic node and % of shared vocabulary	Largest areal vocabulary shared with	Linguistic node and % of shared vocabulary	Largest areal vocabulary shared with
F21b,c 90%	Thagicu (E50), East Nyanza (EJ40), Luhya (EJ30/EJ41)	SN (F21/F22) 81%	F23, F24, (EJ25), DJ60
F21 89%	Thagicu (E50), Corridor (M10/M20), East Nyanza (EJ40)	F31a,b,c 78%	F24, EJ40, F25, F22e, G60
F21/F22b 86%	East Nyanza (EJ40)	F32 78%	F31c, Thagicu (50), East Ruvu (G30), EJ40, Luhya
F22a/F22d/F22e 84%	M10, F23a,b[55], F24, M20, F10	NM (F21/22/24) 78%	*
F23a,b 84%	F23c, Rutara (EJ11-EJ14, EJ21-24), DJ60	NL ((F21, F22, F24, F31)	*
F31a,b 83%	F24, G60	NR (F21/22/24/31/32) 72%	F23a,b, DJ60, EJ25b, F25, EJ40, G60, M32, P13*
F24 82%	F22, F21, G61, M20	Zone F	All Bantu zones found in East Africa: DJ, EJ, E, G, M, N, P

* Only four, four and seven words respectively were used, and the results are only tentative in NM (78%), NL (76%), NR (72%) because of the small number of words in areal vocabulary which makes the statistical pedantry of using a graph unnecessary, although a graph was drawn for NR, 7 words.

[55] F23a,b is strictly SiSuumbwa, while F23c, KiLoongo is treated separately.

(4). While the linguistic tree for Zone F admitted some members and rejected others, patterns observed in the past or those emerging from the current data deserve some mention. For instance, the linguistic trees in Figures 4.1 and 4.16 suggest how the branching of the different Zone F languages took place. Its configuration could be altered depending on the order in which the shared retention percentages are collapsed. In the current tree, KInILaamba and KIRImi are not coordinate anywhere. They join further up the tree, due to KIRImi's drastic change away from the phonologically conservative KInILaamba, and therefore indicating a much earlier split and different history, if it is assumed that they formed one language in the past. The shared vocabulary between KInILaamba and KIRImi which is not represented in the tree is indicated in *Table 4.29*, showing a unique invented vocabulary figure of 20%. As advanced above, such a figure qualifies them to share a coordinate node, suggesting immediate historical branching, shown in *Table 4.13* with a shared retention rate of 72%. However, such unity is open to question given the effect of proximity and subsequent borrowing.

Table 4.29 Lexical innovation in nodes outside the Zone F tree and genetic affiliation

Linguistic node and % of shared vocabulary	Words innovated in Zone F				
	Total # of words	# of Unique creations	% of Unique creations	# of Areal vocabulary	% of areal vocabulary
F31/F32	15	3	20	12	80
F24/F31/F32	1	0	0	1	100*
F33/F34	18	3	17	15	83

* Only one word is indicated, illustrating the possibility that the languages are not immediately genetically related.

The proper interpretation of such a figure, which is also supported by shared unique created vocabulary, depends on whether such innovation is really genetically or areally based. Mere proximity even of languages from different language families can do a lot to change the surface configuration of created vocabulary, an element which Nurse (1988: 43) correctly characterizes as the least important form of borrowing, when a hierarchy of determinants of language similarity are considered. If such unique lexical creations are genetically based, then, some drastic interference can be posited for the difference in phonological inventory and phonetic realization, like the presence of and interaction with several non-Bantu languages in the area. Both scenarios are plausible, and a preference for one over the other depends on how much evidence is available and used to justify it.

On the hand, KiiRaŋgi and KeeMbuwe display a lower percentage of shared unique creations, although they are claimed to be very similar in the literature, including strong assertions of historical affinity by the native speakers of the two languages themselves. One explanation which is likely to be correct is contact with different non-Bantu languages at different periods with varying degrees of intensity, contributing to a different set of new vocabulary.

The assumption that F24/F31/F32 (KIKIImbʊ, KInILaamba and KIRImi) are immediately connected historically is not borne out by both the lexicostatistical and lexical figures. In fact, only one areal word joins them, indicating an unlikely genetic relationship, apart from similarity of Proto Bantu vocabulary retention and areal shared vocabulary. A genetic

connection would be shown by a higher number of shared unique lexical creations enhanced even more by the close proximity obtaining between the speakers.

4.3 CONCLUSION: QUANTITATIVE AND QUALITATIVE EVIDENCE IN GENETIC AFFILIATION

4.3.1 The lexical unity of KISukuma, KINyamweezi and SiSuumbwa

From the preceding sections, it is apparent that KISukuma, KINyamweezi and SiSuumbwa do not form a unified linguistic group. SiSuumbwa, referring mainly to SiSiloombo and SiYoombe, is shown to belong elsewhere since its overall shared retention rate to KISukuma/KINyamweezi is 74%, while the figure between KISukuma and KINyamweezi is 81%, a margin which is high in this context. The 74% rate seems high because of contact, since the number of unique vocabulary proves that. KiLooŋgo, while geographically occupying an area between RuZinza, SiYoombe and KISukuma, with many of its speakers mixed across the whole area, does not fit in well with SiSiloombo or SiYoombe nor with KISukuma/KINyamweezi. It shares with them some words, and departs from them in significant ways, with a shared retention rate of 65% to SiSiloombo/SiYoombe, and 58% to KISukuma/KINyamweezi..

Qualitatively, SiSuumbwa is similar to both Rutara (EJ11-EJ14 and EJ21-EJ24) and Western Highlands (DJ60), although a definite taxonomy can only be confirmed when other criteria like phonology or morpho-syntax are considered. Combining lexis and phonology places

SiSuumbwa (F23a/F23b) in DJ60, the affinity to Rutara being a result of contact. On the other hand, KiLoonjgo (F23c) is shown to belong to Rutara exclusively. A paradox might be the low shared retention rate with oRuhaya, at 57%, roughly the same rate obtaining between KiLoonjgo and KISukuma/KINyamweezi at 58%. Isolation from Rutara for a long time accounts for such low shared rates with Rutara members as a function of contact with many other languages.

On the other hand, KISukuma and KINyamweezi have internal divisions which question the essence of their similarity as a pointer to genetic relationship. For instance, quantitatively, they share a retention rate of 81% of Proto Bantu vocabulary, a high figure warranting genetic affiliation. But the KINyamweezi internal configuration excludes KIDakama whose lexical retention figure gravitates towards KISukuma, a picture supported by the qualitative evidence as well. Phonologically, KIDakama is also isolated from core KINyamweezi (F22a, F22d, F22e). The 81% figure therefore is raw, emphasizing convergence.

4.3.2 Does Zone F exist lexically?

Lexically, each major group: F10, F21, F22, F23, F24, F25, F31, F32, F33 and F34 stands on its own, related to the others only by either the high retention rates from Proto Bantu words in some of them or because of inter-dialectal borrowing facilitated by many years of contact. Because most of the words in the innovations within the Zone F languages are areal, it implies therefore that the small uniquely invented vocabulary is the most important aspect

of evidence for classification. This apparent autonomous status of each group is supported by the absence of solid shared lexical innovations among them, except a few groups at lower levels like KISukuma/KINyamweezi. This Zone F fuzziness is illustrated well by the extreme members of the zone which are not only clearly autonomous, but also do not belong there entirely as immediate sister languages to the core group. These non-members are F10 (KiBende/KiToŋgwe), F23 (SiSuumbwa), F25 (ICIWUUŋgU), F33 (KiiRaŋgi) and F34 (KeeMbuwe). Two common attributes are shared by this group of languages: first, a long list of unique innovations, either as loans or lexical creations not found in the rest of Zone F members, and secondly, being at the edges of the zone, although F33 and F34 are closer than the others.

It is also interesting to note that if 5 out of the 10 members of Zone F do not tally with the other 5 lexically, indicating a weak grouping, then it follows that the zone cannot be called by the same name when half its membership from the original is missing.

Within the remaining 5 members, namely F21 (KISukuma), F22 (KINyamweezi), F24 (KIKIImbU), F31 (KInILaamba) and F32 (KIRImi) and their dialects, only one word can be called a unique innovation of the 7 words which isolate them (example 167). In the Zone F node, one word appears to unite them. But even this one word *mu-ŋampala* 'old male' is doubtful, because it suggests borrowing from Southern Nilotic in one of them, then spreading to the rest, shown in (169) and in the footnote in that section. In addition, the validity of

Zone F as a linguistic unit is further challenged because *mu-nampala* is not mentioned in 6 out of the 10 traditional Zone F members, namely F10, F22a, F22d, F24, F25, F33, F34. This indicates that the speakers of those languages did not originate from one proto-community. The multi-genetic character of the Zone F speech communities is mentioned by Itandala (1979, 1983) and Batibo (1992b) when they discuss the origins of the current KISukuma speakers. Nurse (1999) also doubts the membership in Zone F of F10, F23, F25, F33, F34, as reviewed in Chapter 2. Such multi-genesis as reflected by the different sources of vocabulary parallels the notion of Zone F as a geographical *Abflussloses Gebiet*[56], an area into which various linguistic 'rivers' emptied their vocabulary, never to come out again. It is an area where rivers flow in and the water has no outlet to flow out because it is blocked, probably because of the safety the area offered in the past. This makes Zone F a real *Abflussloses Gebiet* calling for a proper grasp and interpretation of both its history and the phonological and lexical data yielded in this study, a theme treated in Chapter 5.

[56] A German term meaning a linguistic situation in an area whereby features are shared across genetic language boundaries (Kiessling, unpublished manuscript, 2000).

CHAPTER FIVE

CONCLUSION: LANGUAGE AS A TOOL OF HISTORY

5.0 INTRODUCTION

This chapter closes our study by synthesizing the results of Chapter 3 and 4 in relation to the aims spelt out in Chapter 1, given the gaps identified in the literature review, Chapter 2. The reference point involves phonological and lexical innovation focusing on Bantu Spirantization (BS), seven to five vowel reduction (7 > 5), Dahl's Law (DL), glottalization and voiceless nasal formation, covering the area shown in Chapter 1 *Maps 1.2* and *1.2*. Comparison to a number of eastern African languages shown in *Map 1.3* was also attempted with the aim of outlining the linguistic history of SSN and Zone F from the last millennium BC to the present.

As Ehret (2000:273) correctly observes, change of society and its culture is mirrored in the histories of words in the languages spoken by people who express the various aspects of their lives. These words and their behaviour become historical artefacts especially when they show up as reflexes in several languages, indicated by some regular sound changes. The evidence from the phonology and lexis in both SSN and Zone F suggests that they are not unified linguistic entities internally, although the individual languages have been adjacent for a long time. The evidence also suggests that the intermediate nodes in the Zone F hierarchy are not historically valid because the smaller units forming those higher levels are not historically supported by the phonology or vocabulary (See *Figure 4.1* and *4.16*, Chapter 4 in relation to the lexical evidence). The interpretation of the evidence to determine whether the facts

available suffice to justify such historical statements about the languages and their speakers permeates all sections. Without their proper interpretation, the graphs, statistics or patterns as representations of raw data may not be tools of history, since many factors operate in the generation of such raw data, rendering any direct interpretation of those representations difficult and misleading. Normally, there are interpretations which are not valid either linguistically or historically because the conclusions are based on the misuse, misunderstanding, or over-stretching of the limits of the data or models; or when the conclusions are based on false premises, assumptions, arguments, or mere hypotheses.

As objective events in space and time, languages reflect changes in peoples' material conditions, although languages may lag behind in some respects. Such changes are discernible in sounds and words. When a speech community, its language and environment change or disappear altogether, the languages or words are left as traces of that temporary distant series of events.

In oral cultures, the only linguistic evidence of that past is obtained through the synchronic study of languages. On the one hand, if isolated evidence from the phonological, lexical or any other linguistic component is used alone, yielding some results, it does not necessarily mean that such evidence furnishes necessary and sufficient proof giving an accurate interpretation of a complete historical event which was not under our direct observation. The contribution of components such as phonology alone, may not have the same explanatory

impact as the overall effect of the language taken in its totality.

5.1 LINGUISTIC EVIDENCE: THE RESULTS

5.1.1 Evidence from Phonology

5.1.1.1 BS and 7 > 5

Bantu Spirantization is an important phonological process because it takes advantage of a particular context: superclose vowels /i/ and /u/. There are particular, general and universal changes in languages, three metaphors used by Andersen (1988:8). BS is a particular process which has both phonetic and historical significance. Only historically related languages will have this process in Bantu, and when the process is anomalous in a specific language, then some historical explanation can be posited, either in terms of imitation or adaptation. BS could not take place independently in different languages for one reason. BS requires that features of a plosive consonant be deleted by consonantal features of a vowel, the superclose PB *i or *u. In regular assimilatory processes like palatalization, front vowels generally can also spread their features to neighbouring consonants, although the results of BS and palatalization may be identical. Zoll (1995:542) differentiates between BS (which she calls 'Bantu mutation') and palatalization and the distinction highlights the uniqueness of BS as a process which could only occur in related Bantu languages. An independent occurrence would suggest that BS could be found in Indo European, Algonkian, Afro-Asiatic or indeed in all language families of the world.

5.1.1.1.1 BS and 7V 5V in KISukuma2, KINyamweezi and SiSuumbwa

In these three linguistic groupings, only SiSuumbwa underwent Bantu Spirantization. To strengthen this argument, in this group, only SiSuumbwa is also 5V, like the J languages. Due to an implied lengthy contact between SiSuumbwa and KISukuma2/KINyamweezi speakers, facilitated by constant interaction because of geographical proximity, any traces of BS in KISukuma2 and KINyamweezi are a result of words borrowed from SiSuumbwa. This is further strengthened by the continued 7V presence in F21 and F22, with the occurrence of words which appear to have undergone BS under the same phonetic context in SiSuumbwa, and others which did not in the same context. Such an anomalous exception to the general rule of BS within Bantu languages, and in KISukuma2/KINyamweezi in particular, can only be explained in terms of borrowing by imitation rather than a result of an inherited process from a common parent language. Neither is it plausible to posit a process in progress or a frozen one which ceased to operate at one point in the past, implying an adaptation was in progress and then stopped. The presence of double reflexes in KISukuma2/KINyamweezi as shown in Chapter 3 can be explained quite adequately by imitation borrowing, as a process of imperfect reproduction. Since not all words in a language can be borrowed, a process like BS does not spread to all words which fulfil the conditions of the occurrence of BS, because those loan words are only imitated poorly without being adapted into the whole system of the recipient language. In SSN F21, F22 and F23, only F23 shows complete BS with 5V, except in a few borrowed words, while F21 and F22 show an anomalous pattern of BS and non-BS within the same contexts, with solid 7V.

Thus, BS within KISukuma2, KINyamweezi and SiSuumbwa is a good classificatory criterion which manages to isolate SiSuumbwa from KISukuma2/KINyamweezi as languages which have different histories.

5.1.1.1.2 BS and 7V 5V in Zone F

Within the wider Zone F area, full BS is found in F10 and F23 only, part of the same group of languages whose vocabulary does not fit well with the other Zone F languages. Of these, F10 and F23 have also 5V, while F25 shows only traces of BS, with the retention of 7V (Labroussi 1999). This is indicative of separate histories within the zone.

5.1.1.2 Dahl's Law (DL)

Dahl's Law, the dissimilation of voiceless stops when two occur in consecutive syllables, is realized slightly differently in each language where it occurs. In Chapter 3, it was shown that only KISukuma (F21) and KINyamweezi in the whole of the 10 Zone F language groups had consistent and active occurrence of DL. The rest showed traces only likely to have been inherited from their proto-language or borrowed from outside. As a marked feature, DL is unlikely to be inherited from Proto Bantu by KISukuma and KINyamweezi, or from intermediate nodes by others, for three main reasons. Firstly, it would not be confined to eastern African languages only, showing up in Proto-Thagicu/Central Kenya (E50), Proto-Chaga (Kilimanjaro)-Taita (E60/E74), Proto-J (also called Great Lakes) (DJ60, EJ10, EJ20, EJ30, EJ40), Proto-NEC (Sabaki (G40 and E71, E72, E73); Seuta (G23, G24, G31, G34); Ruvu (West and East as shown in (141) and elsewhere); Pare (G21, G22); Proto-West

Tanzania (Zone F, including F33 and F34) and Southern Tanzania Highlands (G60) (Nurse (1980, 1999), Davy and Nurse (1982), Nurse and Hinnebusch 1993). Secondly, it could not occur in F21/F22, EJ40, E50, E60, etc by spreading because they are not adjacent today nor, as far as we know, in the recent past. So, these languages with DL are likely to have split up from a once unitary community because of the restricted distribution of the process. Independent innovation is suspect when pockets of languages with DL in distant zones are not attested. The languages without DL were not part of that speech community. Thirdly, any highly retentive language which retains Proto-Bantu consonants very faithfully as does F24, but does not show significant traces of DL, makes DL inheritance from its immediate proto- language unlikely. If it were a feature of Proto-Bantu or any other proto-language of Zone F, it would show up with some consistency in phonologically and lexically conservative languages such as KIKIImbʊ (F24) and KInILaamba (F31), just as the feature would be distributed more widely and evenly within Zone F if one linguistic node joining them was responsible. Because of this anomaly, the likely possibility is inheritance by only a few languages from an intermediate node, a proto- language from which all languages with DL in eastern Africa descended, as Nurse (1999:21) observes. This intermediate node source explanation of DL is better than any other so far, because it is unlikely that an inherited feature from PB in languages like F24 or F31 can be lost without a trace, while much earlier phonological features from Proto-Bantu continue to exist. What that absence of DL in KiBende (F10), KIKIImbʊ (F24), IcIWʊʊŋgʊ (F24), KInILaamba (F31), KIRImi (F32), KiiRaŋgi (F33) and KeeMbuwe (F34) suggests is that some of those languages with DL

inherited it from one ancestor, while the others might have acquired the appearance through borrowing some words with DL. Since it was only imitation borrowing, few words showed up with DL. In Zone F, DL distribution is an essentially KISukuma2 (F21/F22b) phenomenon, excluding core KINyamweezi (F22a, F22d, F22e). Due to contact, intermarriage and geographical proximity, KINyamweezi speakers might have adopted DL in some borrowed words, while in the majority of the vocabulary, DL does not operate because it was not adapted.

5.1.1.2.1 DL in KISukuma2, KINyamweezi and SiSuumbwa

DL exists in SiSuumbwa[1] only in a few words, as pointed out in Chapter 3. The most telling aspect of the process is in KINyamweezi, where DL does not show up in more than 50% of the words it is expected to occur. This DL status in SSN is recapitulated in *Table 5.1*

Table 5.1 Percentage of DL candidate words which do NOT undergo DL (From 58 words used)

F21a	F21b	F21c	F22b	F22a	F22d	F22e	F23a	F23b	F23c
13	13	4	22	56	71	52	89	87	71

[1] Although there are many traces of DL in Rutara (EJ11-14/EJ21-24 and in J in general), their status is debatable considering the spirit of our study. Most of DJ60 has DL, and if SiSuumbwa (F23a/F23b) belongs there, then it suggests an earlier split.

From *Table 5.1*, it is apparent that the lower the number of exceptions, the more natural is DL in that language or dialect. The higher the number of violations leading towards a 100% rate of exceptions, the more unlikely DL is native in that language or dialect. F21 and F22b have the lowest exceptions, implying that most native words, including all loan words, undergo DL productively, whereas F22a and F22e show only half of the words with DL. Interestingly, F22d behaves as though DL is actually absent in the phonological system, because most of the words are not dissimilated. DL is unlikely to be a graded process, it is either present or absent. Anything less than full DL implies two things: loans of words with full DL or the resultant intermingling of speakers from different speech communities, some of whom originally spoke or had adopted a language with DL but failed to adapt DL words properly and ended up imitating incorrectly. The phonotactics in the recipient languages might not have allowed complete DL, and the speakers then passed on the 'poorly imitated' words to the next generation. Of these two explanations, loan words with DL is the most reasonable account for partial DL in KINyamweezi.

On the other hand, when a DL language like F21 has words which violate the DL principle, then, the most likely explanation is that such words are loans. With this in mind, it is only F21 and F22b which are DL , 4 dialects or languages out of 22 from the whole of Zone F. In KINyamweezi (F22a, F22d and F22e), DL is probably a result of close contact with F21, among other DL languages. This is strengthened by the SiGalagaanza case (F22d) which is currently geographically farthest from both F21 and F22b. The effect of DL fades in F22d

as the DL violations expand to 71%, suggesting less borrowing from F21/F22b as the distance from the centre of DL increases.

5.1.1.2.2 DL in Zone F

Zone F is not characterized by DL, since the dissimilation rule as a consistent process is confined to F21a, F21b, F21c and F22b only, that is, in KISukuma2. Out of the 18 remaining dialects surveyed in the study, 12 show more than 90% exceptions to DL, while the other 6 , which are adjacent to KISukuma2, show more than 50% exceptions. This is shown in *Table 5.2.*

In other words, DL is a good diagnostic tool which isolates KISukuma2 from the rest of Zone F as a historically different group. The remaining languages are not necessarily related because of that negative feature, since many languages have the same negative attribute, and they are not Zone F members.

Table 5.2 Percentage of words violating DL in Zone F (From 58 words used)

F21a	F21b	F21c	F22b	F22a	F22d	F22e	F23a	F23b	F23c	F10
13	13	4	22	56	52	71	89	87	71	100
F24a	F24b	F25	F31a	F31b	F31c	F32a	F32b	F32c	F33	F34
91	98	100	100	100	100	98	100	98	98	95

In historical terms, two groups constitute Zone F: those whose ancestor had DL, and those from a proto-language without DL, suggesting strongly that Zone F is a group created by a convergency of different speech communities rather than by linguistic affiliation from common ancestry. By combining DL with BS, what is obtained is a highly fragmented KISukuma2, KINyamweezi and SiSuumbwa, a group which is traditionally assumed to be cohesive linguistically. The group is actually composed of three independent languages whose genetic closeness is highly questionable, although KISukuma2 and KINyamweezi share the absence of BS, with SiSuumbwa standing alone because of it. At Zone F level, after F10 is removed because of having complete BS, the remaining ones are not touched by either BS or DL, making such an absence of a feature a linguistically poor unifying criterion.

5 1.1.3 Glottalization and Voiceless nasal formation

While glottalization is widespread in other languages, in SSN only SiSuumbwa glottalizes consistently, as shown in *Table 3.36*. In Zone F, KiBende (F10) and KiiRaŋgi (F33) show consistent glottalization, while the rest show none.

Another important phonological process is the presence of voiceless nasals in Zone F in a limited number of languages, namely F21 and F22b. The configuration of these nasals in the zone is further evidence for the genetic unity of KISukuma2 (F21 + F22b) , a unit which further excludes core KINyamweezi as an immediately valid sister language. Voiceless nasal formation in E71, G24, G30, G60, parts of G50 and Kisukuma2 shows a restricted process

not found in other Zone F languages, nor widely distributed in other Bantu languages, suggesting that such an areal distribution may be a sign of some genetic affiliation rather than a purely phonetic accident. It is not a productive process in KiNyamweezi or SiSuumbwa. In fact, in these two, it is found only in loans or in imitations of KɪSukuma2. These nasals are illustrated in (188).

(188)

abdomen, belly, stomach	**ŋ̊uumbɪ** < N-kuumbɪ
grasshopper	**ŋ̊ʊʊmbí** < N-kʊʊmbí
that which scoops (non-human)[2]	**ŋ̊uumbi** < N-kuumbi < -kuumba 'scoop, dig'
kidney	**n̥ɪgŏ**< N-pigo
polygamy	**n̥alĭ** < N-palɪ < PB *-padɪ 'polygamy'
apprenticeship or medical fee	**n̥eéla** < -peelâ 'pay apprentice or medical fees'
running	**n̥eela** -peela < -peela 'run' (cf meela 'chaff')
pig (wild)	**n̥ʊʊmbá** < N-tʊʊmbá
ball of food	**n̥ooŋgĕ** < -tooŋgĕ

The common characteristics of the above words are two: first they are composed of word initial voiceless nasals which are homorganic with the initial voiceless stops of the underlying roots[3] of those words, and secondly, they are unique morphophonological creations or innovations not found elsewhere in eastern African Bantu languages and possibly in the whole of Bantu in such a regular way, as a phonetically motivated, but idiosyncratic feature.

---

[2] If the scooper is human, then it becomes **ŋ-kuumbi** < mu-kuumbi

[3] For a discussion of these alternations in KɪSukuma, see Masesa (1978).

When the nasal prefix is /mu/ and is followed by a voiced stop in the root, then, the /u/ is deleted, and the /m/ becomes homorganic with the initial stop of the root, without forming a voiceless nasal, because there is no voiceless feature in the word, as shown in (189). This pattern is also found in KiMateŋgo[4] and other Rufiji-Ruvuma languages (N10, P10, P20) in general.

(189)

back	**ŋ-gooŋgo** <* mu-goŋgo
ground (cultivated)	**ŋ-gʊʊnda** <*-mu-gʊnda
stranger, visitor, guest	**ŋ-geni** < *mu-geni
trunk (of elephant)	**ŋ-koondo** < mu-koondo[5]

Another important pattern connected with nasals occurs when the prefix /mu/ is followed by a semivowel or liquid sound. The /u/ is first deleted, and the /m/ assimilated to the place features of the semivowel or liquid, as in (190).

(190)

burden load,	**nigo** < mu-ligo < PB *mu-digo
mouth	**nomo** < mu-lomo < PB* mu-domo
work, activity	**nɪmo** < mu-lɪmo < PB*mu-dɪmo
young man	**ɲaanda** <mu-yaanda

[4] Joseph Mbele, p.c.

[5] The pattern of this word violates the KɪSukuma2 nasalization principle, suggesting that it is a loan word because the expected form is ŋ̀oondo because of /k/. The word is also not found in Proto-Bantu, indicating that it might be a non-Bantu word, probably originating from languages like Hadza or Sandawe.

5.1.1.4 Phonological evidence for SSN and Zone F: concluding remarks

The violation of the phonological principles of relatedness and regularity illustrated in Chapter 3 and 4 in the phonology and lexis of KISukuma2, KINyamweezi and SiSuumbwa (SSN) suggest that they are not closely related for the following reasons.

(1) As sister languages in such close proximity, it is genetically suspicious for them to differ in the important phonological processes of DL, BS, 7 > 5, glottalization and voiceless nasal formation. This points to a significant assumption, for instance that when a language shows only some traces of BS, then it is not BS in its strictest sense. The traces are likely to be from borrowed words from a BS language. The evidence against BS in such a language can be explained in two ways. First, the continued existence of the 7V system weakens any claims of BS, since as Zoll (1995) notes, the close vowels triggering BS must have as their essential feature [+syllabic, +consonsantal] in order to make Bantu Spirantization possible. Secondly, 7 > 5 is not a result of BS alone since there are two sources: BS and non-BS 7 > 5[6].

(2) The phonological differences of KISukuma2/KINyamweezi cannot be explained only in terms of the continuum hypothesis either, since DL and voiceless nasalization divide them significantly. They are both suspicious in KINyamweezi (F22a, F22d, F22e).

---

[6] In Zone F, 7 > 5 without BS refers to KeeMbuwe alone, a situation which calls for more empirical research involving many speakers of the language. Otherwise, non-BS 7 > 5 is unusual, and Nurse (p.c.) is sceptical about its truth. Our analysis in Tables *3.3*, *3.4* and *3.5*, Chapter 3 showed clearly that KeeMbuwe shifted to 5V

By extension, if the smaller units like F21, F22 and F23 do not cohere internally, since F10 with its BS and 7 > 5; F25, F33 and F34 do not fit well within the remaining Zone F languages, then what remains is also open to doubt, at least phonologically. The lexical aspect was expected to shed some more light on whether SSN and Zone F could stand as valid linguistically genetic groups. It did, but not in favour of SSN or Zone F.

5.1.2 Evidence from vocabulary

As shown in Chapter 4, two aspects of vocabulary were analyzed, namely, quantitative evidence using lexicostatistics and qualitative evidence by examining lexical innovations. The aim in lexicostatistics is to approximate numerically the extent of relatedness between a pair of languages or group of languages using lexical retention from a proto-language, in percentages. It is assumed that the higher the quantity is shared, the higher the level of relatedness between the languages is suggested, and vice versa. On the other hand, qualitative measures examine the type of similar lexical values or traits shared by a pair or group of languages to determine whether those traits are genetic or not. In this study lexical innovations in any one group are divided into two: unique inventions and areal innovated vocabulary as borrowing or creation (which can also be inherited in some special cases).

5.1.2.1 Quantitative evidence: Lexicostatistics

As a quantitative measure, lexicostatistics tells a story of relatedness, even if it is fragmented, since all second-hand stories cannot match the completeness of first hand experience before,

during or after languages split. For a fuller treatment of a larger geographical area covering more languages using lexicostatistics, see Nurse and Philippson (1980). In both Chapters 3 and 4, it has been observed that Zone F as a linguistic entity is not supported by the phonology and vocabulary. Only smaller units form coherent patterns, corroborated by the intuitions of native speakers of those languages.

5.1.2.1.1KɪSukuma2, KɪNyamweezi, Sisuumbwa and Lexicostatistics

The lexicostatistical figures for this group of three languages cast doubts on SiSuumbwa's membership. For instance, whereas the shared retention rate between KɪSukuma2 (F21/F22b) and core KɪNyamweezi (F22a, F22d, F22e) is 81%, SiSuumbwa shares 71% and 76% with them respectively, as shown in *Table 5.3.*

Table 5.3 KɪSukuma2, KɪNyamweezi, SiSuumbwa and other Zone F languages' retention rates

Bc												
52	Lo											
64	58	Sd										
70	58	81	Nz									
63	56	78	81	Kn								
62	55	76	76	82	Ks							
67	65	71	76	69	68	Sy						
56	51	76	71	75	74	67	Ul					
56	52	79	74	76	72	69	78	Ha				
58	58	75	72	74	71	68	71	74	Ah			
57	56	76	72	74	72	69	72	76	80	Rw		
55	53	72	67	70	67	64	69	71	79	77	Mu	
56	53	71	70	72	70	61	67	66	71	69	69	Mb
51	42	65	63	67	64	54	59	60	62	62	61	64 Ra
61	53	65	69	71	70	59	63	64	64	62	60	63 56 Wu

Sd = 86 Sk = 89 Nk = 90
Nz = 84
Sy = 84
Ul = 83

Abbreviations used in *Table 5.3*:

Be = KiBende; Lo = KiLooŋgo; Kn = KɪKɪɪmbʊ North; Ks = KɪKɪɪmbʊ South;
Ha = KɪnɪHaanzu; Ah = GiAhi; Rw = GɪRwana; Mu = ɣɪnyaMunyiŋanyi, Mb = KeeMbuwe;
Ra = KiiRaŋgi; Wu = ɪCɪWʊʊŋgʊ; Nk = GɪnaNtuzu + JinaKɪɪya
Sk = Nk (GɪnaNtuzu + JinaKɪɪya) + KɪmunaSukuma
Sd = Sk (Nk (GɪnaNtuzu + JinaKɪɪya) + KɪmunaSukuma) + KɪDakama
Nz = KɪNyanyeembe + KɪKonooŋgo + SiGalagaanza
Sy = SiSiloombo + SiYoombe
Ul = KɪnaUshoola + KɪnɪLaamba
Km = Kɪkɪɪmbʊ North + KɪKɪɪmbʊ South
SN = Sd + Nz
Ar = GiAhi + GɪRwana
NM = SN + Km
Lm = Ul + KɪnɪHaanzu
Rɪ = Ar + ɣɪnyaMunyiŋanyi
NL = NM + Lm
NR = NL + Rɪ

This is a difference of almost 10%. KɪSukuma2 shares the same percentage with KeeMbuwe, although there has been no claim that KeeMbuwe forms part of the KɪSukuma2 and KɪNyamweezi group. On the other hand, shared vocabulary with KɪSukuma2 is higher in the following varieties than it is with SiSuumbwa (F23): KɪnɪHaanzu (F31c) (79%), KɪKɪɪmbʊ North (F24a) (78%); KɪKɪɪmbʊ South (F24b), KɪnaUshoola (F31a), GɪRwana (F32a) (all 76%); GiAhi (F32b) (75%); and ɣɪnyaMunyiŋanyi (F32c) (72%). The only figures with lower percentages are from four languages, namely, ɪcɪWʊʊŋgʊ and KiiRaŋgi (both 65%); KiBende (64%) and KiLooŋgo (58%). The use of lexicostatistics to detect the effect of contact as noted by Hinnebusch (1999:177) in *1.3.5.2.3* provides a useful explanation.

The doubts of the validity of SSN are strengthened by other reasons, among them, the naming tradition of the dialects/languages themselves in the first place, since, as words, language

names reveal the history of groups (see *Chapter 2, 2.1.4.8*). The use of directional names is misleading when used to suggest that any languages so named from the point of view of one language are automatically genetically related. In the KISukuma2 and KINyamweezi context, the four cardinal points of the compass refer to the following dialects/languages in the literature: *sukuma* 'north' (F21 and F21a), *dakama* 'south' (F22b), *ŋweeli* (F23 and/or F22d) 'west' and *kɪŋya* (F21c/F22c) 'east'. Abrahams (1967:11-2) gives an excellent summary of this naming problem with plenty of bibliographical details which support the observations from GInaNtuzu in this study.

In GInaNtuzu, for instance, 'north' is not *sukuma* but *shaashi*. The name *shaashi* refers to KiShaashi (EJ44l), a language spoken north of the GInaNtuzu speakers. For any groups of people living west of them, the GInaNtuzu speakers call them *βanaŋweeli* 'westerners', who include some KISukuma, SiSuumbwa, KiLooŋgo and other speakers of other languages or dialects who simply happen to reside on that side, using a different language from theirs, however slightly. They only mention particular names if a group has special characteristics like the KiLooŋgo speakers who were famous hoe manufacturers and itinerant sellers in the past (Odner 1971). Likewise, for people living in the south, they also include speakers of any language, although they are mostly those speaking some form of KISukuma with some slight difference, because no other people using different languages lived there as their immediate neighbour.

The same insight on the misleading connotations of language names is made by Brock (1968:59-61), dealing with iʃiNyiha, that common names which group a number of people often do not imply homogeneity of language and culture. The problem lies in the fact that other people who did not know those cultures well named them in the past. The iʃiNyiha case is not isolated, since it is convenient and easy practice to classify and name entities by the easiest way of reference possible where no other details are available or relevant to the person giving a name.

For other groups, the same naming tradition applies, indicating a non-linguistic reference. For example, in the eyes of the KISukuma speakers who live on the west, eastern speakers, *βanaKIIya*, include any group or language variety that is known to be different from theirs. These include JinaKIIya, GInaNtuzu and KInILaamba speakers. The major problem with these dialectal names is that they are not precise linguistically nor old in usage. For example, Kasele (p.c.) is quite convinced that in reality there is no such language as 'KINyamweezi'. In the present day Tabora Region (See *Map 1.1*, Chapter 1), there are people who are known to speak specific languages or dialects rather than the abstract 'KINyamweezi' which is a socio-political, rather than linguistic entity. These concrete dialects include KINyanyeembe (from Igalʊlaⁱ in the east to Ndono in the west, as well as in the South to Ipoole, Sikooŋge); KIKonooŋgo (from Ipoole southwards); KIYuumbu (the speakers of which moved from

[7] Most of these place names are located within the shaded areas of *Map 1.1*, mainly in the area where the speakers of those dialects or languages mentioned are concentrated, shown in *Map 1.2*.

Ndono and βʊsooke in present day Tabora to the south, in Mpanda, Rukwa Region, in order to avoid sleeping sickness); SiGalagaanza (of Mabama, Ndono and βʊsooke); KɪSaagʊzi (of Kaliua); and KiSiisya (west of βʊsooke). KɪNyamweezi is essentially a political or social group identity. It is 'a language' which no one speaks. According to Kasele (p.c.), the name 'KɪNyamweezi' therefore, was only a label given by the SiSuumbwa speakers to refer to their neighbours. But those SiSuumbwa speakers did not clearly know them either, and they coined the name βaNyamweezi. 'people who come where the moon sets' or simply, 'people of the moon'. Other scholars have offered various ideas on this naming tradition. It was during the slave trade in the 1860s where the slaves normally stayed together in their respective families or clans in the slave markets in Bagamoyo and Zanzibar before being sold to customers. The SiSuumbwa speakers could communicate well due to their better experience in long distance trade, and they were the ones asked about their neighbours.

Lexicostatistically therefore, KɪSukuma2 and KɪNyamweezi form a possible linguistic group based on genetic heritage, whereas it is unlikely that SiSuumbwa belongs there. On the other hand, even this apparent KɪSukuma2 and KɪNyamweezi genetic affinity can be questioned, since it is based on retention only where groups like KɪKɪɪmbʊ share with KɪSukuma2 and KɪNyamweezi a rate of 78%, which is a difference of only 3%, at the rate of 81% between KɪSukuma2 and KɪNyamweezi, as indicated in *Table 5.4*. This doubt is also indicated by the qualitative analysis of the vocabulary. The areal vocabulary is not shared exclusively by SSN as a single genetic group as indicated in *Table 4.23* (Chapter 4) and (192).

Table 5.4. Percentages of retention rates of KISukuma2/KINyamweezi (SN) in relation to other Zone F languages

```
Bc                                                    SN = 81  Nk = 90
52 Lo                                                          Sk = 89
67 58 SN                                                       Sd = 86
63 56  78 Km                                          Km = 82  Nz = 84
67 65  74  69 Sy                                       Sy = 84
56 51  74  75 67 Ul                                    Ul = 83
56 52  77  74 69 78 Ha
58 58  74  73 68 71  74 Ah
57 56  74  73 69 72  76  80 Rw
55 53  70  69 64 69  71  79  77 Mu
56 53  71  71 61 67  66  71  69  69 Mb
51 42  64  66 54 59  60  62  62  61  64 Ra
61 53  67  71 59 63  64  64  62  60  63  56 Wu
```

(192) Affinities in areal vocabulary for F21/F22b and F22a/F22d/F22e

KISukuma2 (F21, with F22b)	(1)M10/M20, E50, EJ40
KINyamweezi (F22, without F22b)	(1) M10; (2) F23a/b, F24, (3) F10, M20

5.1.2.1.2 Zone F languages and Lexicostatistics

Languages which have evolved from a common history are expected to behave in as similar a way as possible. Any slight divergence is an indication of a different path, and therefore a different history. Within Zone F, the languages tend to be conservative phonologically and to some extent, lexically, with only slight variations obtaining in each individual language (Nurse 1980:47; 1999:10). Lexically, the retention of Proto-Bantu words is relatively high, with many words appearing as they do in Proto-Bantu. With such a scenario, all Zone F languages are expected to behave that way if they indeed belong in that group.

According to the data, some languages retain fewer words than the typically conservative languages of the zone, as indicated in *Table 5.5.* Those with lower retention percentages in relation to the NR node (72%) (KISukuma2, core KINyamweezi, KIKIImbʊ, KInILaamba and KIRImi) obtained in Chapter 4, *Table 4.15,* are the remainder of the ten Zone F group members (F11 to F34): KiLooŋgo (55%); KiBende (59%); KiiRaŋgi (63%); IcIWʊʊŋgʊ (65%); SiSuumbwa (69%); and KeeMbuwe (70%). Since KiLooŋgo and SiSuumbwa are grouped together, what remains as NR is only half the languages of Zone F. The remaining 5 (NR) raise similar suspicions of lack of unity because their affinity is lexicostatistical only, while phonologically and lexically in qualitative terms they do not belong together.

Table 5.5. Percentages of retention rates of Zone F

Be							Sk = 89		Nk = 90
52	**Lo**						Sy = 84		Ul = 83
67	**65**	**Sy**					SN = 81		Sd = 86
59	**55**	**69**	**NR**				Km = 82		Nz = 84
56	**53**	**61**	**70**	**Mb**			Ar = 80		NM = 78
51	**42**	**54**	**63**	**64**	**Ra**				Lm = 78
61	**53**	**59**	**65**	**63**	**56**	**Wu**			RI = 78

From the lexicostatistics, it is apparent that most of the traditional language groups retain their status as autonomous entities, with a few adjustments, as summarized in *Table 5.6.*

Table 5.6. Results of lexicostatistical groupings in Zone F

Guthrie's scheme		*This study*	
Code/Group[8]	Languages/Dialects	Code/Group	Languages/Dialects
F10 KiTongwe	F11 KiTonŋgwe	F10	F10 KiBende/KiTonŋgwe
	F12 KiBende		
			F21a KɪmunaSukuma
			F21b GɪnaNtuzu
F21 KɪSukuma	F21 KɪSukuma	F21 KɪSukuma2	F21c JinaKɪɪya [F22c[9]]
			F22b KɪDakama
	F22a KɪNyanyeembe		F22a KɪNyanyeembe
	F22d Mweri		F22d SiGalagaanza
F22 KɪNyamweezi	F22c Kiya	F22 KɪNyamweezi	F22e KɪKonoonŋgo
	F22b Takama		
F23 SiSumbwa	F23 SiSumbwa	F23 SiSuumbwa	F23a SiSiloombo
			F23b SiYoombe
		F23c KiLoonŋgo[10] (Rutara)	F23c KiLoonŋgo
			F24a KɪKɪɪmbʊ North
F24 KɪKɪmbʊ	F24 KɪKɪmbʊ	F24 KɪKɪɪmbʊ	F24b KɪKɪɪmbʊ South
F25 ɪcɪβʊŋgʊ	F25 ɪcɪβʊŋgʊ	F25 ɪcɪWʊʊŋgʊ	F25 ɪcɪWʊʊŋgʊ

[8] All the language names in Guthrie are written in their long forms with the prefixes indicating 'language/speech', although Guthrie himself does not show the prefixes in all languages.

[9] As classified by Guthrie (1948), making our scheme skip F22c within F22 because it does not belong there, and therefore transferred to F21 as F21c.

[10] Although KiLoonŋgo appears under SiSuumbwa, the data shows that it does not belong there. It belongs in Rutara (EJ10/EJ20, especially EJ10).

Guthrie's scheme		*This study*	
			F31a KɪnaUshoola
F31 KɪnɪLamba	F31 KɪnɪLamba	F31 KɪnɪLamba[11]	F31b KɪnɪLaamba C
			F31c KɪnɪHaanzu
			F32a GɪRwana
F32 KɪRɪmi	F32 KɪRɪmi	F32 KɪRɪmi	F32b GiAhi
			F32c ɣɪnyaMunyiŋanyi
F33 KiiRaŋgi	F33 KiiRaŋgi	F33 KiiRaŋgi	F33 KiiRaŋgi
F34 KeeMbugwe	F34 KeeMbugwe	F34 KeeMbuwe	F34 KeeMbuwe

The other schemes for SSN and Zone F by Bryan (1959), Doke (1961) Cole (1961), Guthrie (1959, 1967), Nurse and Philippson (1980a) and Nurse (1999) are reviewed in Chapter 2, **2.1.4**. Those works were produced when gaps in knowledge in both SSN and Zone F generally were more numerous. This study therefore represents a step forward.

5.2 RESULTS: DIVERGENCE SINCE PB AND GROUPINGS

5.2.1 Areal influences

Areal vocabulary normally implies either descent from the same origins, contact and spread or borrowing from a common source at the same or different time and place. In our study, this is illustrated well by both phonology and lexis.

---

[11] The other two dialects are not shown in the table because they were not included in this study for lack of data. These are KɪnɪAmbɪ (F31d) and KɪnaMbʊga (F31e).

Areal phonological features being recycled within Bantu languages make it difficult to detect whether a word is a result of later contact or inheritance from the same proto-source. This is more so if the word is cognate and it has not undergone any significant phonological change. One such case is Dahl's Law. In Zone F, the process is clear in F21/F22b. In F22a/F22d/F22e the picture is very confusing because the majority of the words do not undergo DL. A strong areal influence is suggested where intermingling, intermarriage and cross-migrations are common. The words with DL suggest borrowing through speakers from F21/F22b speech communities who intermingled with F22 speakers as adults with established speech patterns.

This also applies for BS-like features in F21, F22, F24, F25 for borrowed words. The process of BS seems partial because of the same reason of diffusion from centres of BS like F10 and F23 within Zone F, and other surrounding and outlying languages in DJ60, EJ40, E60 G30 and G60 (Hinnebusch and Nurse 1981).

While glottalization is widespread in many areas outside Zone F, within F, only F10 and F23 show consistent glottalization, whereas the widespread occurrence of PB *p → /h/ is a result of outside influence in F21, F22 and F24. Glottalization is absent in F31, F32 and F34, as illustrated in ***3.1.2.1, 3.1.2.2*** and ***3.1.2.3.*** In ***3.2.1.2***, *Table 3.25*, the example refers to SSN. The mixed picture of the reflexes where PB *p is both /h/ and /p/ shows the effect of contact, borrowing and areal spread of words. In some contexts in F21 and F22 the reflexes are all

/h/, emphasizing the great impact in the past of languages like SiSuumbwa (F23). Such a mixed picture of glottalization in F21 and F22 is very similar to the partial operation of BS in these languages and Chaga noted by Hinnebusch and Nurse (1981:59, 72-73). It is a situation which can be explained in terms of heavy borrowing argued by Thomason and Kaufman (1988:53) where features are transferred from speakers of languages in contact regardless of the typological fit with the features of the borrowing language. Such borrowing results in apparent anomalies in the recipient languages' phonological or lexical structure, as demonstrated by anomalous BS and glottalization in F21 and F22, and DL in F22 from F21.

In lexis, areal influence from one source to others is exemplified by a word like -gulaati/-gulaata 'he-goat', from Southern Cuhitic, as in Iraqw gurta (sg), gurtaawee (pl) (Maghway (1995); Burunge gwerati; Kw'adza gulata < Proto-Southern Cushitic *-ʔogur- (Ehret 1980:293) (See (170)). While F21, [F22], F23a,b, F24, [F31] have -gulaati or -gulyaati and G35 vulati on the one hand, and ([F32], F33, F34) -gulaata and Seuta -vulata, -vuata, on the other, it seems that the borrowing and adaptation process of this word depended on the particular route the word traveled, as indicated by the differences in Southern Cushitic between the singular and the plural forms, for example. When borrowing is outside Bantu, detection becomes relatively easier. For instance Nurse (1979b:350-51) posits that the Southern Cushitic speech communities were all over East Africa from Lake Victoria to the Southern Highlands, Ruvu to Central Kenya. The loans in all those areas, especially related to domestic animals attest to that. Batibo (1992b) and Ehret (1971, 1980) examine

vocabulary and its distribution in related and/or surrounding areas across time. In their surveys, lexical diffusion points to some form of contact, although the historical correlation with genetic classifications need more work and water-tight evidence of the sources and direction of borrowing.

5.2.2 Classification by areal vocabulary

In this study, areal vocabulary joining groups is more numerous than unique lexical creations, indicating that the central words most relevant for genetic classification are the shared unique creations as a more reliable type of innovation. Areal vocabulary points to a past connection which may not necessarily be genetic, but only be the result of contact and borrowing, either directly or through second- or third-hand sources.

One hint suggested by the areal shared vocabulary is that the languages involved were closer linguistically and geographically in the past (See *Table 4.23*). This is true of the connection between Corridor languages (M10/M20), East Nyanza (EJ40) and Thagicu (E50) in relation to KISukuma2, or Corridor, SiSuumbwa (F23a/b), KIKIImbU (F24) and KiBende (F10) for KINyamweezi. On closer examination, all such areal influences are mainly contact induced due to proximity rather than being strictly genetic. The only possibility of affiliation occurs between KISukuma2 (F21/F22b) and Thagicu (E50) for two main reasons: presence of DL as an innovated phonological feature in both and some significant shared vocabulary. KINyamweezi shows only shared vocabulary without any other phonological connection.

The comparative method shows clearly the extent of divergence from PB. Languages which share a common history also show the regular phonological changes uniting them, proving their close relatedness. In SSN and Zone F, the principles of relatedness and regularity are violated significantly. These principles were introduced in **1.1.3** as pillars of the comparative method. If these languages were really related, bound by their regular sound correspondences, they would not be so different in salient and diagnostic innovations like DL, BS, 7 > 5, glottalization and voiceless nasal formation, in addition to having lexical stocks from different sources. Diagnostic innovations for groups and subgroups are indeed not always based on regular sound changes as Ross and Durie (1996:6-7) point out. Other peculiar innovations can be examined. In our case, the dialects as low-level units of language groups and families necessitate strict application of analyses to avoid similarities due to contact and subsequent borrowing.

5.3 RESULTS: INDIVIDUAL LANGUAGES AND DIVERGENCE FROM AND SINCE PB

5.3.1 Areal influences

Although the Zone F languages are known for being phonologically and lexically conservative, processes like DL and BS have made some of them diverge from PB, affecting even the most conservative and stable languages such as F24. Another influence is witnessed in F32 with the regular change of PB *p to /ɸ/. F24 and F31 for example have departed very little from PB, especially phonologically. Others like F21 and F22 departed a bit because of the massive interference from many contacts with different languages, both Bantu and non-

Bantu. This can also be said of F25, F33 and F34 which retain reflexes more or less close to PB. Apart from 7 > 5 and other interferences from other Bantu and non-Bantu languages, F34 is not very far from PB.

On the other hand, many of the divergencies in these languages can be traced more to adjacent languages than to internal innovation, especially for those languages spoken by smaller speech communities and surrounded by other, relatively bigger speech communities speaking other languages. This can be said of F10, F23, and again F34.

5.3.2 Classification

After minor adjustments, it is the traditional, individual groupings which are confirmed: **F10**; **F21** (F21a, F21b, F21c (also labelled F22c by Guthrie), F22b); **F22** (F22a, F22d, F22e), **F23** (F23a, F23b); F23c, **F24** (F24a, F24b), **F25**, **F31** (F31a, F31b, F31c), **F32** (F32a, F32b, F32c), **F33**, **F34.** The divergence from PB in each individual language or language group is not significant, especially because of the generally conservative nature of the languages. This relative conservatism does not make them automatically genetically related.

5.4 RESULTS: CONVERGENCE AND CONTACT MODELS

While the elements of divergence in Zone F are mainly a result of contact with other languages which influence them through borrowing some items which trigger some changes, convergence in the group is even more pronounced. However, this is mainly confined to

languages such as F21, F22 and F24 in the area of vocabulary. Their individual phonologies remain distinct.

This lexical convergence can be said to have contributed to the attribution of Zone F as a valid grouping, not only referentially, but also linguistically, validating the contact model by Thomason and Kaufman (1988:51), especially that characterized by casual contact with little bilingualism on both sides. The lexicostatistical effect of contact on retention counts as noted by Hinnebusch (1999) is also valid as an explanation here. Lexicostatistically, there is a reflection of this convergence, indicated by the family tree (*Figure 4.1*), which seems to imply various epochs of separation at different levels from a common ancestor.

Closer examination reveals however that the ancestor of these languages is not immediate although there are some substantial lexical similarities between the Zone F languages as shown in the sample vocabulary in *4.2.1.2.16.* The words they share, though innovations, are not unique to Zone F in the first place. The phonology supports the lack of unity of the zone by indicating that each had a different history, exemplified by F23, parts of which belong to DJ60 (F23a/F23b) and other parts to EJ10 (F23c). In addition, F22b does not belong genetically to F22. F24 does not share the same history with F31 and F32 because only one doubtful word joins them.. The histories of F10, F25, F33 and F34 are also separate. The evidence is furnished by the phonology of each language which displays either retention of the PB system, or separate innovations in terms of BS, 7 > 5, DL, glottalization and

voiceless nasal formation. Since the evidence from lexis and phonology does not match, phonological evidence tends to take precedence as older, and lexical similarity more recent. This analysis of non-genetic similarity is also supported by the shared innovations in lexis. Apart from the individual languages known traditionally, the other traditional groupings in Zone F, SSN, F24/F31/F32, F21/F22/F24/F31/F32 are suspect, because the evidence is shaky, based predominantly on areal features.

5.5 LANGUAGE, ARCHAEOLOGY AND HISTORY

What do these phonological and lexical details tell us about history in the area? The following historical and archaeological works are surveyed briefly in order to compare their results with the linguistic ones, especially in relation to the methods used. The linguistic contributions were dealt with in Chapter 2, **2.1.1** a summary of which is not necessary here. But as a rule of thumb, the interpretation of objective historical events is normally determined in large measure by the methods used and type of facts available to inquirers, among other things. This is due to the fact, for example, that artefacts whether material or linguistic (words) do not necessarily overlap or correlate with biological, genetic, racial, linguistic, historical, cultural, ethnic or other institutional grouping (David 1980:612, Lwanga-Lunyiigo and Vansina 1988:146). In short language and culture do not always correspond. Facts and their interpretations are therefore as good as the methods employed in obtaining the data in the first place. With this in mind, our brief overview takes into account the insights of language contact and the consequent evolution of those languages (Thomason 1983, Thomason and

Kaufman 1988, Nurse 1997, Hinnebusch 1999, Mesthrie and Leap 2000). In addition, most of these works did not have Zone F or SSN as their primary focus, and hence they may address only small sections of the zone.

5.5.1 Soper and Golden (1969), Odner (1971)

Most of the archaeological sites Soper and Golden (1969:53) examined south of Lake Victoria did not show evidence for Early Iron Age occupation. Archaeological evidence in the area is therefore inconclusive with regard to human activity during that era because there is none. But absence of such evidence says nothing of human occupation since iron-making is a cultural innovation, not a precondition of life.

On the other hand, Soper and Golden (1969:76) contribute some understanding of KiLooŋgo (F23c) speakers whom they hypothesize as originating in Buha, Rwanda or Burundi because of their cultural and linguistic affinity to KiLooŋgo. This information was obtained from informants as oral traditions rather than a result of archaeological finds. According to the informants, the Rongo[12] or Longo were smiths who were also first called Kamba, then Geji and finally Rongo (Soper and Golden, 59). Taylor (1969:144), like the rest, mentions the Rongo as a tribe distinct from the Sumbwa (F23) and Zinza (EJ23). Commenting further, he quotes a legend, saying that the Rongo occupied the forests while the Zinza lived on the

[12] The language names written in this section are according to the sources' conventions.

shores of Lake Victoria. Chronologically, the Rongo are said to have been the first to occupy the area. The Rongo or Longo are mentioned also in the F31 area and they predated the KInILaamba speakers. When the KInILaamba speech communities settled in the area they now occupy , the Alongo left peacefully and went to Usukuma (Odner 1971:154).

Although the picture is not clear, some affinity to DJ or J languages generally was observed earlier on, although no formal linguistic research was conducted. This study supports in part the general gist of the hypothesis of SiSuumbwa and KiLoonjgo belonging to J languages.

5.5.2 Itandala (1979, 1983)

Using oral sources gathered by the interview method and written original documents from museums and libraries, Itandala (1983:16) emphasizes the multi-clan nature of βaSukuma, using the βaβiinza clan history. The βaβiinza themselves arrived between 1200 AD and 1600 AD, the exact dates are unknown since various sources using genealogies differ, but falling within that range. They found other clans and Bantu speaking people in the area whose arrival is also not known, although some dates have been suggested, ranging from 500 BC to 1000 AD (Itandala 1983:33-35). These earlier inhabitants spoke proto-KISukuma (KINyamweezi) which formed a base language for incoming groups. Other immigrants such as the βaβiinza were absorbed and adopted proto-KISukuma (KINyamweezi) (Itandala: ibid).

From the examples of recent history (shortly before or after 1700 AD) when the βaβiinza met the Datog, Itandala (ibid:188) mentions that later interactions between them became

more intense. This intensity of social networks was facilitated by the intermarriage of various ethnic groups interacting in the area, evidenced by the example of the Datog proper and place names still in use, especially in eastern βʊSukuma, among other remnants (Itandala 1983:189), as mentioned in *4.2.1.2.16*. Such an interaction of many Bantu and non-Bantu cultures suggests a complex multi-genesis of KISukuma as a base around which substrata clustered (Itandala 1983:34).

5.5.3 Ehret (1994[13], 1999)

The basis of analysis in Ehret (1994:6-8) is linguistic testimony, specifically vocabulary based. The testimony also goes on to establish some groupings among which is Mashariki, comprising the languages in zones DJ, EJ, F, G, M, N, P and S located within eastern Africa, hence the name *mashariki* 'east'. This larger grouping is a combination and modification of both Guthrie (1967-71) and Bastin, Coupez and de Halleux (1983) who do not agree with the idea of a division of Bantu between Western and Eastern Bantu (Ehret ibid:9-11). Within Mashariki there is Kaskazi (north(ern)) from which Proto- Takama emerged. Proto-Takama was the ancestor of present day F21, F22, F23, F24, F31 and F32. Excellent lexical data is provided in terms of unique innovation or loanwords. However, we do not use the vocabulary fully in our study because, first, Ehret's work covers several zones, including Zone F (Takama), and therefore only a few words are given as examples. Secondly, the basis

[13] Ehret, Christopher. 1994. Eastern Africa in the early iron age: explorations in history, 1000 B.C. to A.D. 300, Prepublication manuscript, published 1998 as *An African Classical Age*. Charlottesville: University of Virginia Press.

for obtaining both the years and linguistic affiliations and hierarchies of relationship is not explained explicitly, although it is stated clearly that Mashariki and its subdivisions are not based on genetic linguistic divisions but rather they are geographical distributions of people (Ehret ibid:10). It is difficult to draw linguistic conclusions from a geographical distribution of languages, although some linguistic statements like those of contact and mutual borrowing can be made. Thirdly, the reliance on vocabulary to draw historical correlations is a drawback which is mentioned elsewhere. Words normally spread easily, and their significance is weakened especially when they are not unique to one group. And finally, the distribution of the vocabulary is not analyzed to see the extent of sharing between the different levels of relationship. Without such a breakdown, it is difficult to reach conclusions of genetic affiliation, which is our main focus. For instance the following words are claimed to be Proto-Bantu by Guthrie (1967-71), although Ehret (1994) suggests that they are loans from eastern Sudanic: Proto-Lakes -tebe 'stool' from *tē:b 'to stay, dwell, sit' (cf PB *-tebe 'stool'); Kati *-kolo 'sheep' from *kol 'goat wether' (cf PB *-kodo 'sheep'). It would be more comparable with this work if it were clarified and justified why a certain choice of word origin was preferred over another. That would be possible if the exact distribution and extent of lexical spread was shown, enhancing the great potential of the work in combining history and linguistics

5.5.4 Other sources: ethnography, oral history and linguistic history

Apart from written linguistic, archaeological or historical sources there are other documents which are based on oral accounts recorded from the speakers of some Zone F languages. These explain mainly the origin of people according to collective memory. Some are confirmed by other well-known academic disciplines while others await more evidence for confirmation or refutation. Where knowledge gaps are common, it is not a good idea to privilege some sources of information by inclusion and leaving out others without rigorous academic scrutiny simply because they were not written by professional linguists, archaeologists or historians. Important insights can be gained in examining them with an open mind. However, these sources are few, as shown in **2.1.1**

5.5.4.1 History of SiSuumbwa

According to Abrahams (1967a:25) the origin of F23 speakers is not certain, although he quotes earlier writers as saying that Usumbwa might have been controlled from Karagwe, by Tusi rulers, although he found no evidence to support that claim of imported rulers. Sutton and Roberts (1968:64) quote oral sources as saying that the history of western Tanzania communities is the history of their chiefs, and that some of the Sumbwa chiefs trace their origins in Rwanda. Who the aboriginal inhabitants were, Sutton and Roberts do not say, although the connection with Rwanda is borne out by both the phonological and lexical evidence.

5.5.4.2 History of KɪKɪmbʊ

Shorter (1972:xix) introduces his research findings about the Kimbu in the following way:

> 'I have received no specific linguistic training. However, during my fieldwork in Ukimbu I was obliged to work out an orthography for the Kimbu language which I was recording. Since virtually no language recording had been done in Ukimbu before I went there, there were no existing orthographies to follow; and literate Kimbu vary considerably from each other in the way they write the sounds.'

Shorter's observation was true then, as it continues to be so even today for many of the language varieties in Tanzania. Statements and informal observations not based on research continue to be made. For instance, Shorter (1972:33) compares the opinions of various scholars who mostly relied on informants without any analysis of linguistic data as a backup mechanism, and get confused results, such as Kimbu and Bungu being almost identical, both dialects of Nyamwezi; Kimbu related to another language of Zone G, (G62), the Hehe; or Kimbu as a distinct language but closely related to Nyamwezi, which is contradictory.

5.5.5 Conclusions from the various sources

The works on the linguistic and general history of Zone F and SSN surveyed above share one important thing: they are all hypotheses trying to account for the phenomena, using synchronic data and facts. Guthrie (1967-71) also used synchronic data to draw conclusions in relation to linguistic affiliations in Bantu languages.

The survey of the folk history of some of the Zone F languages shows that some of these folk

histories do actually have historical validity. This study shows traces of evidence to substantiate these mythologies of contact, although the constant movements suggested cannot be handled by the vocabulary since the spread of words does not imply movement of people. On the other hand, lack of evidence only means more research, possibly with a multi-disciplinary approach, involving all branches of linguistics as well as evidence from other areas. This will help unearth more interconnectedness or lack thereof of the Zone F languages.

5.6 DIRECTIONS FOR FUTURE RESEARCH

Several improvements could make studies such as this in the future even better. These are in the areas of method, researcher attributes and source of information.

(1a) Improving method: The lists of words used were not pretested to determine if they were suitable. The problems encountered in **1.3.4** would be reduced or eliminated if this were done. Some items were unusable because they were ambiguous, polysemous, or irrelevant because the list was not given in a trial to a preliminary small target group where the word-list would have been tested and edited to improve its quality before given to the final informants.

(1b) In analyzing the relationship between languages, the focus should not be just on the phonology and lexicon as in the present study. Evidence of morpho-syntax (tense/aspect, noun class (nominal) and tonal systems) would go a great way to supplement lexical and phonological studies as noted by Nurse (1995:72)

(1c) A multiplicity of methods should be employed in these complex historical problems rather than sanctifying a few and ignoring the potential contributions of other approaches. This calls for changes in the training of linguists, historians, archaeologists, and others in related disciplines. This weakness has been observed when scholars adhere to various schools of thought, and they are not interested in employing the approaches of other schools by assuming that their school's approach is the best or the only one worth of attention. A similar point was raised by Nurse (1995:72). This is illustrated by archaeological approaches where German, British, American, continental Europe generally, and Russian historians and archaeologists have had their own schools of thought (Härke 1998). The rest of the scholars and researchers have followed any one of those, depending on who was influencing them at that moment. East African archaeology has been a testing ground for various approaches, although the processualist paradigm of the 1960s and 1970s moulded those East African archaeologists of the 1980s and 1990s (Robertshaw 1990:93) (also see **2.2**). As a balance in the search for truth and facts, wherever they led the scholars, a multi-disciplinary or multi-approach focus would imply taking optional courses like historical linguistics for palaeontologists, historians; or statistics, especially probability theory for linguists for application in lexicostatistics. Many scholars assume incorrectly that scholarship is bias-free, not influenced by ideology, self-interest or the politics of the day (Bunge 1983; Härke 1998:23). It is important to recognize this fact rather than suppress it or pretend it does not exist.

(1d) Equal emphasis should be placed on the intermediate levels of reconstructed languages from which the daughter languages are postulated to have emerged. Many of these levels are only hypothesized without being subjected to rigorous scrutiny. Historical linguistics is not only about reconstruction of ever distant proto(-proto-proto) systems (upstream), but also about historical trajectories (downstream).

(2) Native speakers of these languages should be encouraged even more to do research in their languages so as to inject their intuition and insights.

(3) Other sources of knowledge, especially in oral cultures should be included. For instance rituals like *matambiko* (ancestral offering customs) make it possible to know a people's roots by observing what artifacts are used in the *tambiko* (singular), eg, bamboos, canoes for βaHa which indicate how they earned their living, built their houses, etc (Chubwa 1979:8, 9), Elias Manandi Songooyi[14]. In turn, such sources could be compared with others describing the history of a people in oral traditions, written records, archaeology, history and linguistics.

(4) The stakeholders in the knowledge process, including researchers, funding bodies and society at large should encourage and scrutinize all alternative views, approaches and explanations of phenomena so that enquiry or funding do not prescribe and proscribe areas in which they are only interested. Such approaches of biased interest thwart genuine progress

[14] Personal communication, October 1999, with regard to research in βʊSukuma.

of knowledge in a situation described by Härke (1998) in which what happens is not necessarily what is told because of interests tied in reporting history. In Bantu studies for instance, some languages have not been described because nobody is interested in funding the research there.

(5) Future phases of research in Zone F should concentrate on F10, F25, F33 and F34 to clarify their histories, especially to look for more evidence for Musso's (1968) claims of the connection he makes between KiiRaŋgi and ɪCɪWʊʊŋgʊ . F23 is clearer than previously known, although some more work is needed to ascertain its linguistic history even more precisely. Other languages with questionable histories can be handled in the same way to resolve any fuzzy areas

5.7 CONCLUSION

5.7.1 Answering the research questions

Four questions were posed in Chapter 1 as research questions.

(1). *What are the concrete criteria for the classification of Bantu languages into zones?* Do we need linguistic zones in the first place? Are they historical, areal or typological? Only unique linguistic criteria should define linguistic zones. Purely linguistic criteria do not support the idea of a Zone F. they either fragment the zone and destroy it, or they are shared by other zones, making them trivial for classification.

(2). *How many of the criteria mentioned in number (1) above should a language or variety possess in order to qualify for membership into a zone?* If an entity is claimed to be historical, then all the defining criteria should match. Within Zone F, the languages hardly share anything. In SSN, F21, F22 and F23 are separate, unless those features: BS, 7 > 5, DL, glottalization and voiceless nasal formation are not significant and can be ignored. If they are ignored, which features make SSN, or even F21/F22 one entity?

(3). *What rigorous features define Zone F, excluding all other zones?* This study has found none, apart from vocabulary, innovations which are easily spread and shared, making Zone F only a referential one without any historical validity, except that of convergence by long contact.

4. *Within Zone F, what features distinguish one group of languages from others in exclusion of all others, justifying the isolation of those groups?* For assumed sister languages, unique innovations are the only relevant criteria for classification. The distinct status of each traditional language group is the defining character of Zone F. In combination or isolation, BS, 7 > 5, DL, glottalization and voiceless nasal formation effectively fragment the zone. In addition the behaviour of PB *d in F33 and F34 isolates them from Zone F, while PB *g takes F25 away. Vocabulary and how it is shared are also peculiar to each group.

5.7.2 Concluding remarks

The following are general methodological and theoretical observations based on the analysis of SSN and Zone F in this study:

(1) Cultural and core vocabulary reveal different things if the time of separation from a proto-language is long. Cultural vocabulary reveals either both custom and geographical distance, or only one of them, whereas core vocabulary maintains the genetic relations even when both the cultural and geographical distances are large. For instance, KiLooŋgo or SiSuumbwa do not belong to F20 genetically, although they are adjacent to F20. The closeness to F20 is revealed in cultural vocabulary, which is easily acquired. Similarly, genetic and cultural affiliations do not always overlap, as in the case of F23 in relation to F21/F22 and DJ60/EJ20. Cultural vocabulary explains contact, technological acquisitions and their sources, cultural influence and domination. Core vocabulary reveals genetic heritage. For instance, F23 is predominantly F20 culturally , but DJ60 genetically, as shown by the phonology and vocabulary.

(2) The rates of lexical retention, high or low, are relative rather than absolute, depending on whether the word-lists used are 100, 200, 400 or more. It also depends on the reference group. If one language is compared to languages with high retention rates, its individual high rates may be low with such languages, as in the case of KeeMbuwe (70%) or SiSuumbwa (69%) with NR (F21, F22, F24, F31, F32), since the retention rates there are even higher,

and a cut-off point has to be made. In some contexts, taboo words in social relations lead to vocabulary loss.

(3) In adjacent languages, inter-comprehension depends largely on shared culture, facilitated only by cultural vocabulary where the rules of communication and the changes in material culture are encoded. This can be demonstrated by the Bantu languages, which belong to one family, but where speakers may not communicate if their cultures are different. When cultural distance is great because of geographical separation, communication begins to be difficult or impossible, although the core vocabulary retention rates may be high between any pair of languages. This applies in continua where distance between the furthest dialects of a language makes communication difficult. In other words, inter-comprehension between dialects tends to diminish as distance increases with a concomitant or proportional increase in cultural divergence. Both the distant and adjacent languages or dialects normally share the same core vocabulary. Inter-comprehension therefore cannot be a measure or proof of genetic affiliation between speakers of two languages from the same family since genetic affiliation is a fixed fact, whereas cultural acquisition is not[15].

(4) Linguistic trees (*Figure 4.1* and *Figure 4.16* in Chapter 4), frequency graphs and shared retention percentages are all simplifications and generalizations. They are meant to be

[15] Communication becomes possible only when facilitated by KiSwahili in bi-or multi-lingual speakers. But many people in Tanzania, especially in βʊSukuma, are still functionally monolingual, unless they went to school where they learnt KiSwahili.

descriptive. Their interpretation can be historical even when the methods of deriving a certain set of conclusions are different.

(5) The oral history of iron workers in Buzinza refers to Longo as specialist ironsmiths living there and who came from different clans related to the βuKereβe clans (Hartwig 1971). Buzinza is the south-western part of southern Lake Victoria. This oral version of history is corroborated by our data since linguistically, KiLoonjgo fits well within Rutara, both phonologically and lexically.

(6) The statements made about similarities or differences about languages in the zones, especially as suggested by Guthrie (1948, 1967-71), have often been taken for granted. Only anecdotal accounts are sometimes given without any rigorous evidence to ascertain the status of entities sufficiently and necessarily. For instance, the cohesion of core Zone F (F21, F22, F24, F31, F32) or SSN (F21, F22, F23) was based on evidence which was not sufficient.

(7) It is important to recognize the advantages and limits of disciplines and their methods, as Vansina (1995b:396) observes with regard to their theory and/or practice. For instance, in archaeology he notes the advantage of producing concrete evidence. But its limitations include the tendency to adhere to particular paradigms or to have a free range of the imagination (Vansina 1995b:396). In history, one problem in both written and oral testimonies is the privileging of some sources, especially favouring the testimony given by leaders and ignoring the versions of common people (Nurse 1979b:384). One advantage with

such testimony is the limitation on the free range of the imagination because the events are narrated by others, minimizing the subjectivity of the historian.

(8) Guthrie's (1967-71) classification was mainly synchronic. It did not include the historical dimension when classifying the languages into zones, although the consonantal reconstructions and the vocabulary were historically grounded. The effect of language contact and the resulting areal influences were not considered. The phonological and lexical analysis in this study has shown that SSN and Zone F are not valid linguistically.

REFERENCES

Abdallah, Yohana B. 1991. *The antiquity of the WaYao*. Ndanda-Peramiho: Benedictine Publications. [Abdallah, Yohana B. 1991. *Zamani za Wayao (Chiikala cha Wayao)*. Ndanda-Peramiho: Benedictine Publictions.]

Abrahams, R. G. 1967. *The peoples of Greater Unyamwezi, Tanzania: (Nyamwezi, Sukuma, Sumbwa, Kimbu, Konongo)*. London: International African Institute.

Andersen, Henning. 1989. Understanding linguistic innovations. Breivik, Leiv Egil and Ernst Håkon Jahr (eds). *Language change: contribution to the study of its causes*. Berlin: Mouton de Gruyter. 5-27.

Anttila, Raimo. 1972. *An introduction to historical and comparative linguistics*. New York: Macmillan Publishing Co., Inc.

Armstrong, Robert G. 1962. Glottochronology and African linguistics. *Journal of African History*. ***III. 2***. 283-290.

Barnard, Alan. 1995. Wilmsen's reply: a comment. *African Studies*. ***54.1***. 45-46.

Bastin, Yvonne. 1983. Statistique grammaticale et classification des langue bantoues. *Africana Linguistica*. ***9***. 17-37.

Bastin, Yvonne, André Coupez and Michael Mann. 1999. Classification lexicostatistique des langues bantoues sur base de 542 relevés. Tervuren: Musée Royal de l'Afrique Centrale, and London: School of Oriental and African Studies. [quoted originally from 1995 on-going project, then]

Batibo, Herman M. 1982. Some linguistic contributions to the cultural history of the people of the Great Lakes and the neighbouring regions. Unpublished paper, University of Dar es Salaam.

Batibo, Herman M. 1985. *Le Kesukuma, langue bantu de Tanzanie: phonologie et morphologie*. Paris: Editions Recherche sur les Civilisations.

Batibo, Herman M. 1990. Vowel length: the forgotten distinctive feature in Swahili? *Afrikanistische Arbeitspapiere*. ***23***. 53-72.

Batibo, Herman M. 1991a. The two-directional tone melody spread in Sukuma. *Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society, February 15-18 1991*. Berkeley, California: Berkeley Linguistics Society. 15-24.

Batibo, Herman M. 1991b. The tone structure of the Sukuma nominal forms. Francis Katamba (ed). *Lacustrine Bantu phonology*. Cologne, University of Cologne: *Afrikanistische Arbeitspapiere*, ***25***. 31-53.

Batibo, Herman M. 1992a. The fate of ethnic languages in Tanzania. Matthias Brenzinger (ed). *Language death: factual and theoretical explorations with special reference to East Africa*. Berlin: Mouton de Gruyter. 85-98.

Batibo, Herman M. 1992b. The peopling of Busukuma: a linguistic account. *Journal of Linguistics and Language in Education* ***6***. 43-76.

Batibo, Herman M. and Franz Rottland. 1994. The markedness principle and Swahili syllable structure. *Afrikanistische Arbeitspapiere*. ***40***. 49-81.

Batibo, Herman M. 2000. The state of spirantization in Sukuma-Nyamwezi: a historical account. Kulikoyela Kahigi, Yared Kihore and Maarten Mous (eds). *Lugha za Tanzania Languages of Tanzania: Studies dedicated to the memory of Prof. Clement Maganga*. Leiden: Research School for Asian, African, and Amerindian Studies (CNWS), Universteit Leiden. 19-29.

Bennett, Patrick R. 1967. Dahl's Law in Thagicũ. *African Language Studies*. **8**. 127-159.

Bergsland, Knut and Hans Vogt. 1962. On the validity of glottochronology. *Current anthropology*. **3.2**. *April*. 115-153.

Bleek, Wilhelm H.I. 1862-9. *A comparative grammar of South African languages, 2 Vols*. Capetown: Juta and London: Trübner.

de Blois, Kees F. 1975. *Bukusu generative phonology and aspects of Bantu structure. Annales, Série IN-8° - Sciences Humaines- N° 85*. Tervuren, Belgique: Musée Royal de l'Afrique Centrale.

Bosha, Ibrahim Ahmed. 1993. *Taathira za Kiarabu katika Kiswahili pamoja na Kamusi Thulathiya (Kiswahili-Kiarabu-Kiingereza). The influence of Arabic language on Kiswahili with a Trilingual Dictionary (Swahili-Arabic-English)*. Dar Es Salaam: Dar Es Salaam University Press.

Botne, Robert with Kisanga Salama-Gray (compilers). 1994. *A Lega and English dictionary with an index to Proto-Bantu roots*. Köln: Rüdiger Köppe Verlag.

Bourquin, W. 1955. Notes on "close vowels" in Bantu. *African Studies (formerly Bantu Studies)*. **14. 2**. 49-62.

Brenzinger, Matthias, Bernd Heine and Gabriele Sommer. 1991. Language death in Africa. Harris, Robert H. and Eugenius M. Uhlenbeck (eds). *Endangered languages*. Oxford/New York: BERG Publishers Ltd. 19-44.

Brock, Beverley. 1968. The Nyiha (of Mbozi). Roberts, Andrew (ed). *Tanzania before 1900*. Nairobi: East African Publishing House, for The Historical Association of Tanzania. 59-81.

Bryan, Margaret A. 1959. *The Bantu languages of Africa*. London: Oxford University Press, for the International African Institute.

Bunge, Mario. 1983. *Treatise on basic philosophy Volume 6: epistemology and methodology: understanding the world*. Dordrecht: D. Reidel Publishing Company.

Byarushengo, Ernest Rugwa. 1976. Strategies in loan phonology. *Berkeley Linguistic Society*. II. 78-87.

Bynon, Theodora and Michael Mann. 1973. Papers on Comparative Bantu: an introduction. *African Linguistic Studies*. **XIV**. 1-5.

Chami, Felix A. 1994. *The Tanzanian coast in the first millennium AD: an archaeology of the iron-working, farming communities*. Uppsala: Societas Archaeologica Upsaliensis.

Chami, Felix A. 1998. A review of Swahili archaeology. *African Archaeological Review*. **15.3**. 199-218.

Chami, Felix A. 1999a. Graeco-Roman trade links and the Bantu migration theory.

Anthropos. ***94***. 205-215.

Chami Felix A..1999b. Roman beads from the Rufiji delta, Tanzania: first incontrovertible archaeological link with the *Periplus*. *Current Anthropology.* ***40.2***. 237-241.

Chubwa, P. 1979. *WaHa: history and development. Tabora*: TMP Book Department. [Chubwa, P. 1979. *Waha: historia na maendeleo.* Tabora: TMP Book Department].

van Coetsem, Frans. 1988. *Loan phonology and the two transfer types in language contact.* Dordrecht: Foris Publications Holland.

Cole, Desmond T. 1959. Doke's classification of Bantu languages. *African Studies.* ***18.4***. 197-213.

Cole, Desmond T. 1961. Doke's classification of Bantu languages. Doke, Clement M. and Desmond T. Cole (eds). *Contributions to the history of Bantu linguistics. Papers contributed by C.M. Doke and D.T. Cole (1935-1960).* Johannesburg: Witwatersrand University Press. 80-96.

Committee for Cultural Research (The), at Bujora. 1988. *Basukuma traditional beliefs in sayings, folktales, proverbs and norms, 3: traditional religion.* Paris: CID editions. [Kamati ya Utafiti wa Utamaduni, Bujora. 1988. *Imani za jadi za Kisukuma katika misemo, hadithi, methali na desturi ya maisha, 3: traditional religion.* Paris: CID editions].

Cory, Hans. 1953. *Sukuma law and custom.* London: Oxford University Press, for the International African Institute.

Cory, Hans and M.M. Hartnoll. 1945. *Customary law of the Haya tribe, Tanganyika Territory. [Second impression 1971].* London: Frank Cass & Co. Ltd.

Coupez, André. 1955. *Esquisse de la langue Holoholo.* Tervuren: Commission de Linguistique Africaine.

Dahl, Edmund 1915. *Nyamwesi worterbuch.* (Abhandlungen des Hamburgischen Kolonialinstituts, 25; Reihe B. Völkerkunde, Kulturgeschichte und Sprachen, 15). Hamburg: L. Friederichsen.

Dalby, David. 1970. Reflections on the classification of African languages, with special reference to the work of Sigismund Wilhelm Koelle and Malcolm Guthrie. *African Language Studies.* ***XI***. Presented to Malcolm Guthrie on the occasion of his retirement, School of Oriental and African Studies, University of London. 147-171.

David, Nicholas. 1980. Early Bantu expansion in the context of Central African prehistory: 4000 - 1 BC. Luc Bouquiaux (éditeur). *L'expansion bantoue. Actes du colloque International du CNRS, Vivier-France, 4-16 avril 1977.* Paris: CNRS (Centre National de la Recherche Scientifique). 609-647.

Davy, Jim and Nurse, Derek. 1982. Synchronic versions of Dahl's Law: the multiple applications of a phonological assimilation rule. *Journal of African Languages and Linguistics.* ***4***. 157-195.

Deetz, James. 1967. *Invitation to archaeology.* George Garden, New York: The Natural History Press for The American Museum of Natural History.

Dempwolff, Otto Von. 1912. Beiträge zur Kenntnis der Sprachen in Deutsch-Ostafrika.

Buwe, 7. 1-27.
Dickens, Patrick. 1995. Why anthropologists need linguistics. The case of the !Kung. *African Studies.* ***54.1.*** 17-35.
Dixon, R.M.W. 1997. *The rise and fall of languages.* Cambridge: Cambridge University Press.
Doke, Clement M. 1959. Bantu language pioneers of the nineteenth century. *African Studies.* ***18. 1.*** 1-27.
Doke, Clement M. 1961. The growth of comparative Bantu phonology. Clement M. Doke and Desmond T. Cole (eds). *Contributions to the history of Bantu linguistics. Papers contributed by C.M. Doke and D.T. Cole (1935-1960).* Johannesburg: Witwatersrand University Press. 55-79.
Downing, Laura J. (Compiler). 1989. A bibliography of East African languages and linguistics 1880-1980 (excluding Somali and Swahili) based on the holdings of the University of Illinois at Urbana-Champaign Library.
Ehret, Christopher. 1968a. Linguistics as a tool for historians. *Hadith 1: Proceedings of the annual conference of the Historical Association of Kenya 1967.* Nairobi: East African Publishing House, for the Historical Association of Kenya. 119-138.
Ehret, Christopher. 1968b. Sheep and Central Sudanic peoples in southern Africa. *Journal of African History.* ***9.2.*** 213-221.
Ehret, Christopher. 1971. *Southern Nilotic history: linguistic approaches to the study of the past.* Evanston, Illinois: Northwestern University Press.
Ehret, Christopher. 1980. *A historical reconstruction of Southern Cushitic phonology and vocabulary.* Berlin: Dietrich Reimer Verlag.
Ehret, Christopher. 1984. Between the coast and the Great Lakes. D.T. Niane (ed). *General history of Africa Vol. 4: Africa from the twelfth to the sixteenth century.* London & Paris: Heinemann and UNESCO. 480-497.
Ehret, Christopher. 1994. Eastern Africa in the early iron age: explorations in history, 1000 BC to AD 300. Unpublished ms.[Published as Ehret, Christopher. 1998. *An African classical age: eastern and southern Africa in world history, 1000 BC to AD 400.* Charlottesville: University of Virginia Press and Oxford: James Currey].
Ehret, Christopher. 1999. Subclassifying Bantu: the evidence of stem morpheme innovations. Jean-Marie Hombert and Larry M. Hyman (Eds). *Bantu historical linguistics: theoretical and empirical perspectives.* Stanford, California: Center for the Study of Language and Information Publications. 43-147.
Ehret, Christopher. 2000. Language and history. Bernd Heine and Derek Nurse (eds). *African languages: an introduction.* Cambridge University Press. 272-297.
Embleton, Sheila M. 1986. *Statistics in historical linguistics.* Bochum: Studienverlag Dr. N. Brockmeyer.
Fagan, Brian M. et al.(eds).1996. *The Oxford companion to archaeology.* New York: Oxford University Press.
Fairbanks, Gordon H. 1955. A note on glottochronology. *International Journal of American Linguistics.* ***21.2.*** 116-120.

Fischer, David Hackett.1970. *Historians' fallacies: toward a logic of historical thought*. New York: Harper Torchbooks, Harper & Row, Publishers.

Gardner, Martin. 1957. *Fads and fallacies in the name of science*. New York: Dover Publications.

Geyh, Mebus A. and Helmut Schleicher. 1990. *Absolute age determination: physical and chemical dating methods and their application*. Berlin: Springer-Verlag.

Goldsmith, John A. 1985. On tone in Sukuma. Didier L. Goyvaerts (Ed). *African linguistics: essays in memory of M.W.K. Semikenke*. Amsterdam/Philadephia: John Benjamins Publishing Co. 167-187.

Grace, George W. 1964. The linguistic evidence. *Current anthropology*. ***5.5.*** *December*. 361-368.

Greenberg, Joseph. 1963. *The languages of Africa*. The Hague: Mouton.

Gudschinsky, Sarah. 1955. Lexico-statistical skewing from dialect borrowing. *International Journal of American Linguistics*. ***21.2***. 138-149.

Gudschinsky, Sarah. 1956. The ABC's of lexicostatistics (glottochronology). *Word*. ***12.2.*** 175-210.

Gussenhoven, Carlos and Haike Jacobs. 1998. *Understanding phonology*. London: Arnold.

Guthrie, Malcolm. 1948. *The classification of the Bantu languages*. London: Oxford University Press.

Guthrie, Malcolm. 1962a. A two-stage method of comparative Bantu study. Collected Papers in Oriental and African Studies. *African Languages Studies*. ***III***. 1-24.

Guthrie, Malcolm. 1962b. Some developments in the prehistory of the Bantu languages. *Journal of African History*. ***III.2***. 273-282.

Guthrie, Malcolm. 1962c. Bantu origins: a tentative new hypothesis. *Journal of African Languages*. ***1.1***. 9-21.

Guthrie, Malcolm. 1967. *The classification of the Bantu languages*. London: Dawsons of Pall Mall for the International African Institute.

Guthrie, Malcolm. 1967-71. *Comparative Bantu*. Farnborough: Gregg International Publishers Ltd.

Guthrie, Malcolm. 1970.Contributions from comparative Bantu studies to the prehistory of Africa. David Dalby (ed). *Language and history in Africa. A volume of collected papers presented to the London Seminar on Language and History in Africa (held at the School of Oriental and African Studies, 1967-1969)*. London: Frank Cass & Co. Ltd. 20-49.

Halle, Morris. 1995. Feature geometry and feature spreading. *Linguistic Inquiry*. ***26.1***. 1-46.

Harris, John and Geoff Lindsay.1995. The elements of phonological representation. Durand, Jacques and Francis Katamba (eds). *Frontiers of phonology: atoms, structures and derivations*. London and New York: Longman. 34-79.

Hartwig, Gerald W. 1971. Oral traditions concerning the Early Iron Age in northwestern

Tanzania. *African Historical Studies.* ***IV. 1.*** 93-114.

Härke, Heinrich. 1998. Archaeologists and migrations. *Current Anthropology.* ***39.1.*** 19-45.

Heine, Bernd. 1973. Zur genetischen Gliederung der Bantu-Sprachen. *Afrika und Übersee.* ***56.*** 164-185.

Heine, Bernd. 1976. Knowledge and use of second language in Musoma Region - a quantitative survey. *Kiswalhili.* ***46.1.*** 49-59.

Heine, Bernd. 1980. Methods in comparative Bantu (The problem of Bantu linguistic classification). Bouquiaux, Luc (éditeur). *L'expansion bantoue. Actes du colloque International du CNRS, Vivier-France, 4-16 avril 1977.* Paris: Centre National de la Recherche Scientifique. 295-308.

Henrici, Alick. 1970. Numerical classification of Bantu languages. *African Language Studies.* ***XI.*** 82-104.

Herbert, Robert K. and T.N. Huffman 1993.A new perspective on Bantu expansion and classification: linguistic and archaeological evidence fifty years after Doke. *African Studies, C.M. Doke Centenary.* ***52.2.*** 53-76.

Hinnebusch, Thomas J. 1976. Swahili: genetic affiliations and evidence. *Studies in African Linguistics, Supplement 6, November.* 95-108.

Hinnebusch, Thomas J. 1999. Contact and lexicostatistics in comparative Bantu studies. Hombert, Jean-Marie and Larry M. Hyman (Eds). *Bantu historical linguistics: theoretical and empirical perspectives.* Stanford, California: Center for the Study of Language and Information Publications. 173-203.

Hinnebusch, Thomas J. and Derek Nurse. 1981. Spirantization in Chaga. *Sprache und Geschichte in Afrika, 3.* Hamburg: Helmut Buske Verlag. 51-78.

Hinnebusch, Thomas, Derek Nurse and Martin Mould. 1981. Studies in the classification of Eastern Bantu languages. *Sprache und Geschichte in Afrika, Beiheft 3.* Hamburg: Helmut Buske Verlag.

Hock, Hans Henrich. 1991. *Principles of historical linguistics, 2nd revised and updated edn.* Berlin: Mouton de Gruyter.

Homburger, L. 1913. *Etude sur la phonétique historique du Bantou.* Paris.

Hyman, Larry M. 1994. Cyclic phonology and morphology in Cibemba. Jennifer Cole & Charles Kisseberth (eds). *Perspectives in phonology.* Stanford, California: Center for the Study of Language and Information Publications. 81-112.

Hyman, Larry M. and John B. Lowe. **A computerized database for theoretical and historical Bantu phonology and morphology 1994-1997**. Online Project. Department of Linguistics, University of California, Berkeley, CBOLD Grant Proposal, National Science Foundation Grant. Access date: 28th February 1998. http://bantu.berkeley.edu/CBOLDDocs/NSFProposal.html

Hyman, Larry M. and John B. Lowe. **A computerized database for theoretical and historical Bantu phonology and morphology II 1997-2000**. Online Project. Department of Linguistics, University of California, Berkeley, CBOLD Grant Proposal, National Science Foundation Grant. Access date: 13th March 2000.

http://www.linguistics.berkeley.edu/CBOLD
Hymes, Dell. 1960a. Lexicostatistics so far. *Current anthropology*. ***1.1***. *January*. 3-44.
Hymes, Dell. 1960b. More on lexicostatistics. *Current anthropology*. ***1.4***. *July*. 338-345.
Hymes, Dell. 1964. Validity of chronology. *Current anthropology*. ***5.4***. October. 324-326.
Itandala, A. Buluda. 1979. Ilembo, Nkanda and the girls: establishing a chronology of the Babinza. Webster, J.B. (ed). *Chronology, migration and drought in interlacustrine Africa*. New York: Africana Publishing House and Dalhousie University Press. 145-173.
Itandala, A. Buluda. 1983. A history of the Babinza of Usukuma, to 1890. Unpulished PhD thesis, Dalhousie University, Halifax.
Jeffers, Robert J. and Ilse Lehiste. 1982. *Principles and methods for historical linguistics*. Cambridge, Massachusetts: The MIT Press.
Jellicoe, Marguerite. 1969. The Turu resistance movement. *Tanzania Notes and Records*. ***70***. 1-12.
Johnson, Marion R. 1979. The natural history of Meinhof's Law in Bantu. *Studies in African Linguistics*. ***10.3***. 261-271.
Kahigi, Kulikoyela Kanalwanda. 1987. Bantu reconstruction and the stops versus continuants controversy. *Utafiti*. ***ix.2***. 1-20.
Kahigi, Kulikoyela.Kanalwanda. 1988. Aspects of Sumbwa diachronic phonology. Unpublished PhD Dissertation, Michigan State University.
Kahigi, Kulikoyela.Kanalwanda. 1995. Darajia za uimara na mabadiliko ya vizuio vya Kibantu-mama. *Kioo Cha Lugha*. ***1.2***. 8-27. [Kahigi, K.K. 1995. The strength hierarchy and the evolution of Proto Bantu stops. *Kioo Cha Lugha*. ***1.2***. 8-27].
Kahindi, H.E. 1988. Whether Sumbwa has been more influenced by Ha, Sukuma or Nyamwezi. Unpublished B.A. Linguistics Project, Department of Linguistics, University of Dar es Salaam.
Kairanya, Peter Manyama.1990. History and customs of the βaJita of Musoma. Unpublished ms. University of Dar Es Saalaam. [Peter Manyama Kairanya. 1990. Historia na utamaduni wa kabila la Wajita. Muswada usiochapishwa, Chuo Kikuu cha Dar Es Salaam]
Katamba, Francis. 1989. *An introduction to phonology*. London: Longman.
Kidamala, Daudi, translated and arranged by E.R. Danielson. 1961. A brief history of the Waniramba people up to the time of the German occupation. *Tanganyika Notes and Records. March*. ***56***. 67-78.
Kihore, Yared. 2000. Historical and linguistic aspects of Kihacha. Kahigi, Kulikoyela, Yared Kihore and Maarten Mous (eds). *Lugha za Tanzania Languages of Tanzania: Studies dedicated to the memory of Prof. Clement Maganga*. Leiden: Research School for Asian, African, and Amerindian Studies (CNWS), Universteit Leiden. 67-80.
Kimambo, Isaria N. 1993. The east African coast and hinterland, 1845-80. Joseph Ki-Zerbo (ed). *General history of Africa, Vol 6: Africa in the nineteenth century until the 1880s*. London : Heinemann. 234-269.

Kimenyi, Alexandre. 1979. *Studies in Kinyarwanda and Bantu phonology*. Edmonton, Alberta: Linguistic Research, Inc.

Kollmann, Paul. 1899. *The Victoria Nyanza: the land, the races and their customs, with specimens of some of the dialects*. London: Swan Sonnenschein & Co., Ltd.

Kroeber, A.L. 1955. Linguistic time depth results so far and their meaning. *International Journal of American Linguistics.* ***16.4***. 91-104.

Kuhn, Thomas S. 1970. *The structure of scientific revolutions. Second edition, Enlarged.* Chicago: The University of Chicago Press.

Labroussi, Catherine. 1999. Vowel systems and spirantizations in Southwest Tanzania. Hombert, Jean-Marie and Larry M. Hyman (eds). *Bantu historical linguistics: theoretical and empirical perspectives*. Stanford, California: Center for the Study of Language and Information Publications. 335-377.

Last, J.T. 1885. *Polyglotta Africana Orientalis*. London. Society for the Promotion of Christian Knowledge.

Lestrade, G.P. 1948. The classification of the Bantu languages. A review. *African Studies 7. 1. March*. 175-184.

Lwanga-Lunyiigo, S. and Jan Vansina. 1988. The Bantu speaking peoples and their expansion. Elfasi, M.(ed). *General history of Africa Vol. 3: Africa from the seventh and eleventh century*. London & Paris: Heinemann and UNESCO. 140-162.

Mabala, Leo Bassu. 1988. *The Watutsi: traditions and customs*. Ndanda-Peramiho, Tanzania: Benedictine Publications. [Mabala, Leo Bassu. *Watutsi: mila na desturi*. Ndanda-Peramiho, Tanzania: Benedictine Publications].

Maddieson, Ian. 1984. *Patterns of sound*. Cambridge: Cambridge University Press.

Maddieson, Ian. 1991. Articulatory phonology and Sukuma 'aspirated' nasals. *Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society February 15-18 1991*. Berkeley, California: Berkeley Linguistics Society. 145-154.

Maganga, Clement and Thilo C. Schadeberg. 1992. *Kinyamwezi: grammar, texts, vocabulary*. Köln: Rüdiger Köppe Verlag.

Maghway, Josephat B. 1995. *Annotated Iraqw lexicon. African Language study series 2*. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa (ILCAA).

Maho, Jouni, Derek Nurse and Gerard Philippson. <jouni.maho@african.gu.se> "The posted version" 29th September 2000. Personal email.

Mange, J.M. Kadaso. 1971. Notes and Documents: Mfumo ya βʊkwɪmba: The origins of βʊkwɪmba. Translated by Edward Shillinde Kadaso, and edited and annotated by C. F. Holmes. *African Historical Studies. IV.1* 115-137.

Masele, Balla. 1993. Voiceless nasals in Sukuma. Unpublished MPhil Dissertation. Cambridge: University of Cambridge

Masele, Balla. 1996. Homorganic voiceless nasals in Kisukuma nouns: a feature geometry account. Unpublished ms. St John's: Memorial University of Newfoundland.

Masele, Balla. 1997. Dense social networks and language maintenance: KɪSukuma and its eastern neighbours. Unpublished ms. Memorial University of Newfoundland.

Masele, Balla 2000. Nominal tone in JinaKIIya dialect, KISukuma. Kahigi, Kulikoyela, Yared Kihore and Maarten Mous (eds). *Lugha za Tanzania Languages of Tanzania: Studies dedicated to the memory of Prof. Clement Maganga*. Leiden: Research School for Asian, African, and Amerindian Studies (CNWS), Universteit Leiden. 97-109.

Masesa, Samuel Masele Elias. 1978. The organization of the Kesukuma verbal word: the systemic approach versus the generative transformational approach. Unpublished M.A. (Linguistics) Dissertation, University of Dar Es Salaam.

Massamba, David P.B. 1986. On the influence of local languages on Kiswahili: the case of Mara Region in Tanzania. *Kiswahili. **53. 1 & 2***. 67-83.

Massamba, David P. B. 1996. *Phonological theory: history and development*. Dar Es Salaam: Dar Es Salaam University Press.

McElhanon, K.A. 1970. Lexicostatistics and the classification of Huon Peninsula languages. *Oceania. **40.3***. 214-231.

McMahon, April M. S. 1994. *Understanding language change*. Cambridge: Cambridge University Press.

Mdachi, Patrick L. 1991. *The Wanyaturu of Singida: their traditions and customs*. Ndanda-Peramiho, Tanzania: Benedictine Publications. [Mdachi, Patrick L. 1991. *Wanyaturu wa Singida: mila na desturi zao*. Ndanda-Peramiho, Tanzania: Benedictine Publications.]

Meinhof, Carl. 1932. *Introduction to the phonology of the Bantu languages*: being the English translation of "Grundriß einer Lautlehre der Bantusprachen". Translated, revised and enlarged in collaboration with the author and Dr Alice Werner by N.J.v. Warmelo. Berlin: Dietrich Reimer, Ernst Vohsen.

Meeussen, Achille E.1962. Meinhof's rule in Bantu. *African Languages Studies. **III***. 25-29.

Meeussen, Achille E. 1973. Comparative Bantu: test cases for method. *African Linguistic Studies. **XIV***. 6-18.

Meeussen, A.E 1980. Bantu lexical reconstructions. *Archives d'Anthropologie Schrief voor anthropologie **27.*** Tervuren.

Mekacha, Rugatiri D.K. 1993. Language death: conceptions and misconceptions. Review article of M. Brenzinger (ed). 1992. *Language death: factual and theoretical explorations with special reference to East Africa*. Berlin and New York: Mouton de Gruyter. *Journal of Pragmatics. **21.*** 101-116.

Mekacha, Rugatiri D.K. 1997. Disconnecting education: language as a determinant of the quality of education in Tanzania. A critical rejoinder. *Journal of Linguistics and language in education, New Series*. Department of Foreign Languages and Linguistics, University of Dar Es Salaam. ***3***. 95-105.

Mesthrie, Rajend. 2000. Language contact 2: pidgins, creoles and 'new Englishes'. Mesthrie, Rajend et al. *Introducing sociolinguistics*. Philadephia: John Benjamins Publishing Company. 279-315.

Mesthrie, Rajend and William L. Leap. 2000. Language contact 1: maintenance, shift and

death. Mesthrie, Rajend et al. *Introducing sociolinguistics*. Philadephia: John Benjamins Publishing Company. 248-278.

Michels, Joseph W. 1973. *Dating methods in archaeology*. New York and London: Seminar Press.

Mihanjo, Eginald P.A.N., Betram Mapunda and Nestor N. Luanda. 1999. Redrawing the southern slave trade route: a look at social, economic, cultural and demographic impacts. Paper presented at Mkonge Hotel, Tanga, as a summary from an on-going project). Faculty of Arts and Social Sciences, University of Dar Es Salaam.

Milroy, J. and L. Milroy. 1985. Linguistic change, social network and speaker innovation. *Journal of Linguistics*. ***21***. 339-384.

Mkirya, Benjamin. 1991. *The history, traditions and customs of the WaZanaki*. Ndanda-Peramiho: Benedictine Publications. [Benjamin Mkirya. 1991. *Historia, mila na desturi za Wazanaki*. Ndanda-Peramiho: Benedictine Publications.]

Mkude, Daniel J. 1999. Language policy in Tanzania and the building of democracy: Kiswahili/English against the languages of ethnic communities. Z.N. Tumbo-Masabo and E.K.F Chiduo (editors). *Kiswahili in education*. Dar Es Salaam: Institute of Kiswahili Research, University of Dar Es Salaam. 14-31. [Mkude, D.J. 1999.Ujenzi wa demokrasia na sera ya lugha nchini Tanzania: Kiswahili/Kiingereza dhidi ya lugha za jumuia ndogondogo. Z.N. Tumbo-Masabo na E.K.F. Chiduo. (Wahariri). *Kiswahili katika elimu*. Dar Es Salaam: Taasisi ya Uchunguzi wa Kiswahili, Chuo Kikuu cha Dar Es Salaam. 14-31.]

Mous, Maarten. 1993. *A grammar of Iraqw*. Hamburg: Helmut Buske Verlag GmbH.

Mpiranya, Fidèle. 1995. *Swahili phonology reconsidered in a diachronic perspective: the impact of stress on morphonemics and syllable structure*. Köln: Rüdiger Koppe Verlag.

Musso, Michael. 1968. *Mukwava and his tribe*. Arusha: Eastern Africa Publications Limited. [Michael Musso. 1968. *Mukwava na kabila lake*. Arusha: Eastern Africa Publications Limited]

Muzale, Henry R.T. 1998. A reconstruction of the Proto-Rutara tense/aspect system. Unpublished PhD thesis. St. John's: Memorial University of Newfoundland.

Newman, James L. 1970. *The ecological basis for subsistence change among the Sandawe of Tanzania*. Washington, D.C: National academy of Sciences.

Nishida, Toshisada and Shigeo Uehara. 1981. Kitongwe names of plants: a preliminary listing. *African Study Monographs*. ***1. March***. 109-131.

Nurse, Derek. 1979a. Description of sample Bantu languages of Tanzania. *African Languages Langues Africaines 5.1*. London: International African Institute.

Nurse, Derek. 1979b. *Classification of the Chaga dialects: language and history on Kilimanjaro, the Taita Hills, and the Pare Mountains, with 24 tables and 3 maps*. Hamburg: Helmut Buske Verlag.

Nurse, Derek. 1982. Bantu expansion into East Africa: linguistic evidence. Christopher Ehret and Merrick Posnansky (eds). *The archaeological and linguistic reconstruction of African history*. Berkeley: University of California Press. 199-222.

Nurse, Derek. 1988. The diachronic background to the language communities of southwestern Tanzania. *Sprache und Geschichte in Afrika. Band 8.* Hamburg: Helmut Buske Verlag. 15-115.

Nurse, Derek. 1995a. 'Historical' classification of the Bantu languages. *Azania XXIX-XXX.* 65-75.

Nurse, Derek. 1995b. Social issues in historical linguistics in Africa. *Proceedings of the 21st Annual Meeting of the Berkeley Linguistics Association. Parasession on historical issues in sociolinguistics social issues in historical linguistics.* Berkeley: Berkeley Linguistics Association. 465-477.

Nurse, Derek. 1997. The contributions of linguistics to the study of history in Africa. *Journal of African History.* ***38.*** 359-391.

Nurse, Derek. 1999. Towards a historical classification of East African languages. Jean-Hombert, Marie and Larry M. Hyman (Eds). *Bantu historical linguistics: theoretical and empirical perspectives.* Stanford, California: Center for the Study of Language and Information Publications. 1-41.

Nurse, Derek and Gérard Philippson. 1980a. The Bantu languages of East Africa: a lexicostatistical survey. Edgar C. Polomé & C. P. Hill (eds). *Language in Tanzania.* London: Oxford University Press, for International African Institute. 26-67.

Nurse, Derek and Gérard Philippson. 1980b. Historical implications of the language map of East Africa. Luc Bouquiaux (éditeur). *L'expansion bantoue. Actes du colloque International du CNRS, Vivier-France, 4-16 avril 1977.* Paris: Centre National de la Recherche Scientifique. 685-711.

Nurse, Derek and Thomas J. Hinnebusch. 1993. *Swahili and Sabaki: a linguistic history.* Berkeley: University of California Press.

Nurse, Derek and Gérard Philippson (forthcoming). *The Bantu languages.* London: Curson Press.

Odner, Knut. 1971. An archaeological survey of Iramba, Tanzania. *Azania, VI.* 151-198.

Olson, Howard Stanley. 1964. The phonology and morphology of Rimi. PhD thesis. Hartford, Connecticut: The Hartford Seminary Foundation.

Pelto, Pertti J. and Raymond H. Muessig. 1980. *The study and teaching of Anthropology.* Columbus, Ohio: Charles E. Merrill Publishing Company.

Polomé, Edgar C. 1980. The languages of Tanzania. Polomé, Edgar C. and C.P. Hill (eds). *Language in Tanzania.* Oxford: Oxford University Press/International African Institute. 3-25.

Posnansky, Merrick. 1981. Introduction to the later prehistory of sub-Saharan Africa. G. Mokhtar (ed). *General history of Africa Vol. 2: ancient civilizations of Africa.* London & Paris: Heinemann and UNESCO. 533-550

Renfrew, Colin and Bahn, Paul. 1996. *Archaeology: theories, methods and practice, Second edition.* New York: Thames and Hudson, Inc.

Richardson, Irvine. 1959. *The role of tone in the structure of Sukuma.* London: School of Oriental and African Studies, University of London.

Richardson, Irvine (Compiler) and W. M. Mann (Ed). 1967. *A vocabulary of Sukuma.*

London: School of Oriental and African Studies, University of London.
Roberts, Andrew. 1968. The Nyamwezi. Roberts, Andrew (ed). *Tanzania before 1900*. Nairobi: East African Publishing House, for the Historical Association of Tanzania. 117-150.
Ross, Malcolm D. 1996. Contact-induced change and comparative method: cases from Papua New Guinea. Durie, Mark and Malcolm Ross (eds). *The comparative method reviewed*. New York: Oxford University Press.180-217.
Ross, Malcom. 1998. Sequencing and dating linguistic events in Oceania: the linguistics/archeology interface. Blench, Roger and Matthew Spriggs (eds). *Archaeology and language II: correlating archaeological and linguistic hypotheses*. London: Routledge. 141-173.
Rottland, Franz. 1982. *Die Südnilotischen Sprachen: Beschreibung, Vergleichung und Rekonstruktion. Band 7*. Berlin: Dietrich Reimer Verlag.
Rottland, Franz. 1989. Southern Nilotic reconstructions. M. Lionel Bender (ed). *Topics in Nilo-Saharan linguistics. Nilo-Saharan Linguistic Analysis and Documentation Vol 3*. Hamburg: Helmut Buske Verlag, 219-231.
Rubagumya, Casmir M. 1997. Disconnecting education: language as a determinant of the quality of education in Tanzania. *Journal of Linguistics and language in education, New Series*. Department of Foreign Languages and Linguistics, University of Dar Es Salaam. *3*. 81-93.
Rugemalira, Josephat M. 1994. Runyambo verb extensions and constraints on argument structure. Unpublished PhD Dissertation, University of California at Berkeley.
Schadeberg, Thilo C. 1979. Über die Töne der Verbalen Formen in Rimi. *Afrika und Übersee. 57*.
Schadeberg, Thilo C. 1986. The lexicostatistic base of Bennett and Sterk's reclassification of Niger-Congo with particular reference to the cohesion of Bantu. *Studies in African linguistics. 17.1*. April. 69-83.
Schadeberg, Thilo C. 1991. High tone shift in KiNyamwezi. *Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society February 15-18 1991*. Berkeley, California: Berkeley Linguistics Society. 210-221.
Schadeberg, Thilo C. 1994. Spirantization and the 7-to-5 vowel merger in Bantu. Dominicy, Marc and Didier Demolin (eds) *Journal of Linguistics, Issue devoted to sound change 9. 1994 5*. 73-84.
Schadeberg, Thilo C, Jouni Maho, Gerard Philippson and Derek Nurse. <dnurse@morgan.ucs.mun.ca> "Re: Bantu language code numbers & BMM" 7th April 2000. Personal email.
Schmidt, Peter R. 1978. *Historical archaeology: a structural approach in an African culture*. Westport, Connecticut: Greenwood Press.
Schoenbrun, David L. 1990. Early history in Eastern Africa's Great Lakes region: linguistic ecological and archaeological approaches, ca 500 B.C. to ca 1000 A.D. Los Angeles: University of California at Los Angeles.
Schoenbrun, David L. 1997. The historical reconstruction of Great Lakes Bantu cultural

vocabulary: etymologies and distributions. *Sprache und Geschichte in Afrika Beihefte. Beiheft* **9.** Köln: Rüdiger Köppee Verlag. 1-351.

Seligman, C.G. 1939. *The races of Africa. 2th revised edition*. London: Thornton Butterworth Ltd.

Seligman, C.G. 1966. *The races of Africa. 4th edition*. London: Oxford University Press.

Shorter, Aylward. 1968a. The Kimbu. Roberts, Andrew (ed). *Tanzania before 1900*. Nairobi: East African Publishing House, for the Historical Association of Tanzania.96-116.

Shorter, Aylward. 1968b. Nyungu-ya-Mawe and the 'Empire of the Ruga-rugas'. *Journal of African History.* ***ix.2***. 253-259.

Soga, J. Henderson. 1930. The south-eastern Bantu (Abe-Nguni, Aba-Mbo, Ama-Lala). *Special number of Bantu Studies, Journal devoted to the scientific study of Bantu, Hottentot and Bushman. Supplement No. 4. March.* Johannesburg: Witwatersrand University Press.

Soper, Robert C. and B. Golden. 1969. An archaeological survey of Mwanza Region, Tanzania. *Azania, IV.* 15-90.

Stegen, Oliver. <Oliver_stegen@sil.org> "Rangi language research survey chg Stegen" 6th August 1997. Personal email.

Stevenson, Roland C. 1991. Relationship of Kadugli-Krongo to Nilo-Saharan: morphology and lexis. Bender, Lionel M. (ed). *Proceedings of the fourth Nilo-Saharan Linguistics Conference (Nilo-Saharan: Linguistic analyses and Documentation Vol.7).* Hamburg: Helmut Buske Verlag. 347-369.

Sutton, John E.G. and A.D. Roberts. 1968. Uvinza and its salt industry. *Azania, III.* 45-86.

Swadesh, Morris. 1950. Salish internal relationships. *International Journal of American Linguistics.* ***16.4***. 157-167.

Swadesh, Morris.1955. Towards greater accuracy in lexicostatistic dating. *International Journal of American Linguistics.* ***21.2***. 121-137.

Swadesh, Morris. 1964. Linguistics as an instrument of prehistory. Dell Hymes (ed). *Language, culture and society: a reader in linguistics and anthropology.* New York: Harper and Row, Publishers. 575-584.

Swilla, Imani N. 1981. The noun class system and agreement in Chindali. *La civilisation des peuples des grands lacs*. Paris: Karthala. 379-393.

Swilla, Imani N. 2000. Borrowing in Chindali. Kulikoyela Kahigi, Yared Kihore and Maarten Mous (eds). *Lugha za Tanzania/Languages of Tanzania: Studies dedicated to the memory of Prof. Clement Maganga.* Leiden: Research School for Asian, African, and Amerindian Studies (CNWS), Universteit Leiden. 297-307.

Thomason, Sarah G. 1983. Genetic relationship and the case of Ma'a (Mbugu). *Studies in African Linguistics.* ***14, 2.*** 195-231.

Thomason, Sarah G. and T. Kaufman. 1988. *Language contact, creolization and genetic linguistics.* Berkeley: University of California Press.

Taylor, Douglas, and Irving Rouse. 1955. Linguistic and archeological time depth in the West Indies. *International Journal of American Linguistics.* ***21.2***. 105-115.

Trigger, Bruce G. 1990. The history of African archaeology in world perspective. Robertshaw, Peter (ed). *A history of African archaeology*. London: James Currey. 309-319.

Trigger, Bruce G. 1994. Paradigms in Sudan archaeology. *The International Journal of African Historical Studies*. **27.2**. 323-345.

Trudgill, Peter. 1989. Contact and isolation in linguistic change. Leiv Egil Breivik and Ernst Håkon Jahr (eds). *Language change: contributions to the study of its causes*. Berlin and New York: Mouton de Gruyter. 227-237.

Tucker, A.N. 1946/47. Foreign sounds in Swahili. *Bulletin of the School of Oriental and African Studies*. **11**:854-871; **12**:214-232.

Vansina, Jan. 1995a. New linguistic evidence and 'the Bantu expansion'. *Journal of African History*. **36, 2**. 173-195.

Vansina, Jan. 1995b. Historians, are archaeologists your siblings? *History in Africa*. **22**. 369-408.

Whybrow, C.1948. Sukuma bird names. *Tanganyika Notes and Records*. **25**. *June*. 56-62.

Wilmsen, Edwin N. 1995. On mutual dependence of anthropology and linguistics: a comment on Dickens. *African Studies*. **54.1**. 36-44.

Worsley, P.M. and J.P Rumberger.1949. Remains of an earlier people in Uhehe. *Tanganyika Notes and Records*. **27**. *June*. 42-46.

Wrigley, Christopher. 1960. Speculations on the economic prehistory of Africa. *Journal of African History*. **1. 2**. 189-203.

Zoll, Cheryl. 1995. Consonant mutation in Bantu: a squib. *Linguistic Inquiry*. 26. 536-545.

APPENDICES

Appendix 1. Zone F word-list: F23 and F10

No	English	Si-Sùùmbwà SìSìlòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
133	abdomen, stomach, belly	ndà	ndà	lùβúúndà	ìindà
495	abscess, boil	ìhùté	ìhùté	ihùtè/máhùtè	ìhùùté
786a	abundant/abound	kwòòkálà	nìiŋki	pàà	-iŋgì, pá
786	abundant	kwòòkálà	nìiŋki	pàà	-iŋgì, pá
571	abuse, insult	kòtòká	kùtùká	kùzúmà	kùtùkà
252	abuse, reproach	kòtòká	kùtùká	kùzúmà	kùkàlihílà, kùgàámbà
809	accustomed (get)	kòmànìlìlà	kòmànìlìlà	kùmànyìlìlà	kùbèélélà
274	act (vt)	kùgèmà, kòβèézyà	kùgèmà	kùkólà	kwíílà
229	add up	kwòòŋgèzyà	kwòòŋgèzyà	kwòòŋgèzà	kùgùŋgìlisyà
927	adjacent (be); border (vi)	kòβà hííhì hííhì	kùβì há lùvùùmbà	kùvùmbànà	kùfitíŋkánà
662	adze, carpenter's	mbìizò	mbìizò	mbìizò	kàbàásò
254	affair	ìgààmbò	ìgààmbò	ìgàámbò/βìgàámbò	ìyàámbò/màyàámbò
1002	afraid (be)	kwòòβáhà	kwòòβáhà	kùtíínà	kùyòβàhâ
168	agriculture	ìlìmà	ìlìmà	ìlímà	bùlìmì
926	all	-òónà	-òónà	-óónà	-óónsè
248	alter, change	kòpilòsyà	kùpìlùlà	kùpilùlà	kùhìíndùlà
595	animal	ndìmú	ndìmú	ndímù	ìnywèélé
617	answer a call	kùzùmyà	kùzùmyà	kwìikìlizà	kwìtáβílà
782	answer, reply	kòjibú ?	kwìitikilà	kwìikilizà	-
664	ant (reddish-brown biting)	mpàzì	mpàzì	bùsisì	màánsúnswà
122	ant-hill	màkényí	sìginà, sìgòlò	chìswá/vìswá	síyùlù
663	ant (small)	màkèzì, βòsìinsí	nìnágwè	inyàáŋgó	lúnyèèlélè
586	anvil	ìbàámfízyò	-	itéélèlò	-

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
989	apply by stretching, spread over	kòtìíndíílà	kòßàámbà	kùßàámbà	kùbàámbà
976	appoint, set up	kùchàágùlà	kùchàágùlà	-	kwìmíká
55	arm, hand	kùßòkó	kòßòkó	mùkónò	kùßókó
771	armpit	kwàáhá	kwàáhá	kwááhà	ŋkwááhá
203	arrange, put in order	kùpàáŋgà	kùßèézyà	kùtùúmbìkà	kùpááŋgá, kùlyóhélésyà
204	arrange, put right, repair	kùßèézyà	kùßèézyà	kùkòlà	kùlyóhélésyà
478	arrive	kùhìkà	kùhìkà	kùhìkà	kùfìkà
665	arrow	mwàámbì gwè bútà	mwàámbì	ìßànò	mwàámbì/myàámbì
666	arrow (head of); spear head	mùtwè	mwàámbì	mwàámbì	mwàámbì, ìsúmó
337	ashes	màvú	ìvú/màvú	ízù/màzú	ìfúúndú/màfúúndú
199	ask for	kùsàbà	kùsàßà	kùsàßà	kùsèèyà
89	assemble, collect (vt)	kòlòndìkà hámwì	kùlùúndìkà	kùsòózà	kùlyóhélésyà, kwìsà hámwì
789	aunt (father's sister)	sèéŋgì	sèéŋgì	sèéŋgì	sèéŋgè
148	avoid, dodge	kwìbáánzyá	-	kwìífùúndà	-
688	awe, fear of God	ßòòhà	kwòòßáhà	-	ßòòßá
667	axe	mpàsá	mpàsá	nséényà	mpàsá
364	baboon, ape	ŋkòbè	ŋkòßè	èèŋkòßè	ijáándá
634	back of (at the)	nùmá	nùmà	nyùmà	kúnyùmà
297	back	mùgòóŋgò	mùgòóŋgò	mùgòóŋgò	múγòóŋgò
297a	backbone	igùfà lyà múgòóŋgò	ìgùfwá lyá mùgòóŋgò	mùgòóŋgò	múγòóŋgò
27	bad	ibí	iβí	-íβì	ìbí
37	bad (become), rotten (vi)	kùßòlá	kùßòlá	kùßòlà	kùßòlà
87	bait	syàámbò	syàámbò	wàámbò/vyàámbò	fyàámbó/syàámbò
398	banana (plant)	ntòòkè	lòtòòkè	lùgèmà	ìkóóndè

No	English	Si-Sùùmbwà SìSilòòmbò	SiSùùmbwà SìYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
397	banana (fruit)	ìtòòkè	ìtòòkè	ìtòòkè, ìhíísè	ìkóóndè
399	banana (for cooking)	ìtòòkè lyé kùtéékà	ìtòòkè	ìtòòkè	-
1005	baobab	-	-	-	-
1022	bark (of tree)	ìgúlà	ìgúlà	ìgúlà, ìβááŋgwà	-
313	barren (of living being)	mùgúúmbá	mùgùùmbá	mùgùùmbà	-
314	barren (of land)	nsí yè bò	βwòòmé	chìkámò	ìnsí jìkàmìlè
376	base of tree-trunk	ìziìŋgà	ìziìŋgà	ìziìŋgà	ìsííndò
650	bask (in the sun), warm oneself	kwìikòòntà	kwìikóóntá	kwòòtá	kùgóntélà
576	basket of open wicker-work	sìkàámpú	ìsàànzò	ìsàànzò	m(ù)séɣè
577	basket (plaited)	sìkàámpú	sìkápó	chìkápó	sìkápò
643	bathe	kwòògà	kwòògá	kwòògá	kùnyááɣà
498	be fitting, behove	kùfwàáyà ?	-sògá	kùhìkà	kùlyóóhà
1	be, become	kòbà	kòβá	kùβá	kùβá
955	beach, coast, shore	mpwàànì	mpwàáni	mwààlò	mpwáányí
827	bead(s)	βùsàló	βùsàló	bùkwáánzi	βùkàsì
416	bean, kind of bean (from *Phaseolus vulgaris*)	mfèèlì	ŋkùúndè	lùkòólè/ŋkòólè	mùnyéɣà
417	bean, small (from bean plant)	màhàlàgè	màhàlàgè	màhàlàgè	mùnyéɣà
844	bean (runner)	mfèèlì	mfwèèlì, ŋkùúndè, màkùúkù	lùkòólè	kàbálámà
1037	bear child	kùbùtà	kùβùtá	kùzàálà	kùfyàálà
147	beard	kàsàkù, nsàkù	kàsàkù	bìlèzù	kàlèfù/tùlèfù
768	beat	kòhòólà	kùhùúlà	kùtéélà	kùhúúlà
759	beautiful	-sògá	-sógá	ìzìmà	-sóɣá, lyòòhílé

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
162	bed	bùlíílì, sitàándà	sìtàándà	chìtáándà	βùlìlì, sìtàlá
161	bedstead	βòkààŋgágà	-	ìnchìinzi	βùlìlì
653	bee	nzòkí	nzòkí	ènzóchì	nsùsí
775	beer	bùsèlè	bùsèlè	màálwà	màálwá
497	befit, suit	kùbéézyà, kùbèègézyà	kòßèélà	kùsèmèzà	kùlyòòhèlà
101	below, underneath	mùùnsí	hàànsì	hàànsì	hèèfó
186	bend, twist (vi)	kwìigóóndâ	kùgòòndà	kùgòòndà	-
468	bend (vt)	kwìhìná	kùgòòndà	kùgòòndà	-
193	bewitch	kùlògà	kùlògà	kùlògà	kùlòyà
930	bifurcation, cross-roads	màzilà sàáŋgwé	-	ndèkàànilò	màháándá nsílá
222	bile	ndùlwè	ndùlwè	ndùlù	nyòòŋgò
262	bind up, splice	kùlàgùlà	kùlàgùlà	kùlàgùlà	kùhàámbá
658	bird-lime	bwìílèèmbò	-	wìlèémbwà	bùlíímbò
811	bird	nòní	nòní	nyònyì	inyònyì, kànyònyì
46	birth (give), to a child	kùßùtá	kùßùtá	kùzàálà	kùfyáálà
125	bite	kùlùmá	kùlùmá	kùlùmà	kùtètá
221	bitter	-kàlf, bilùlù	-kàlí	kùsàálìlà	sìkálí
223	bladder	lùhàgò	lùhàgò	ènsàkò	-
482	blind person	mùhòfù	mùhòfù	mùhòfù	mùhòfù
669	blood	màgàzì	màgàzì	βwáámbà	màlásó
496	blow on, blow up	kùfùùlà	kùpùùgà	kùhùùhà	kùpùùsyà
238	blow bellows	kùvùgùtà	kùvùgùtà	kùzùgùtâ	kùfùkùtà mùfùßà
463	blow away	kòhèhá	kùhèhà	kùhéhèèzà	kùhèhémùsyà, kùhèhémùlà
776	boast, brag, praise oneself	kwiibónà	-	kùtáámbà	kwitéhá
676	boat	βwàátò	βwàátó	bwàátò	βwàátó

No	English	Si-Sùùmbwà SiSìlòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
670	body	mùbìlì	mùβìlì	mùβìlì/mìβìlì	sítàámbò/fitáámbò
581	boil up	kùsèbà	kùsèβà	kùβìlà	kútòkòtà
30	boil (vt)	kùsèvyà	kùsèvyà	kùsèβyà	kùtéékà
433	bone	igùfwà	ìgùfwá	ìgúfwà	ìfùhá/màfùhá
564	bore a hole	kùdùlà	kùdùlá	kùfùmùlà	kùtùβúlá
1008	born (be)	kùbùtwà, kùzyàálwà	kùβùtwá	kùzáálwà	kùfyáálwà
910	borrow	kùkòpà	kùkòpà	kùtíízà	kùkòpà
872	bottle	nsúpà	nchùpà	èènchúpà	ìnsúpà
928	boundary	mpákà ?	lùvùùmbà/mvùùmbà	lùvùùmbà/mvùùmbà	mùpákà, iβíβí
671	bow, bending	kwìihìná	βùtá	bútà	kwínàmà
508	bow	bùtá	βùtá	bútà	bùtá
953	bowstring	lùgè	lògè	lùgòhí	kàjè ká bùtá
58	brain	βwòòŋkò	βwòòŋgò	βwòòŋgò	-
509	branch	ìtàbàzì	ìtàβázì	ìtàβázì	ìtàβí
375	bread	ŋkàátè	mùkáátè	mùkáátè	mùkátè ?
831	break wind*	kùnìà mùfùzí	kùnìà mùfùzí	kùnyáámpà	kùnìà ìpùsí
77	break, snap	kùvùnà	kùvùná	kùhééndà	kùfúnáyá
1036	break wind	kùnìà mùfùzí	kùnìà mùfùzí	kùnyáámpà	kùnìà ìpùsí
17	breast (of a woman)	màbèélè	màβèélè	màβéélè, ìtútù/màtútù	màbéélè
489	breath, breathing	mùhèèmò	mùhèèmò, kùhèèmà	mùhèèmò	-
490	breathe, rest	kùhèèmà	kùhèèmà	kùhèèmùkà	kùhéémélà
138	bridge	ìdàlázyà	ìdàlájà ?	lùtìíndè	dàlájà
139	bridge (wooden)	bùlàálé	-	lùtìíndè	bùlàlò
885	bring, fetch	kùlèétà	kùlèétà	kùlèètà	kùléétà
171	bring to light	kùtóólà hèèpè	kùmànìísyà	kùmànyíísà	kùlàáŋgìisyà
882	bring up (a child)	kòlèlà	kùlèlà	kùlèlà	kùlèlà
660	brook, stream	mwìigà	ìhòólà	mùgèlà	móóŋgá
942	broom	lòhyàágízyò	lùhyàágílò	lòhyáágìzò	syèèsò

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
113	broth	mùfwá	mùfwà	mùfwá	mùsùní
381	brother-in-law, sister-in-law	mùlámù	mùlàmú	mùlámù, mùlámùkàzi	mùlàmú
341	brother (older)	mùkùlú(úyò)	mùkòlò	mùkúlù	mùkòlò
673	brother, relative, fellow-tribesman	βàdùgú	mùdùgù	mùzàálè	wà mùyánà
874	bruise badly, take the skin off	kwihàò lúdili	kùnòhólà	kùkùùβùlà	kùfúmá ikòbá, kùfùlàlikà
71	buffalo	mbògò	mbògó	èmbògò	mbòyó
807	build	kwòòmbèkà	kwòòmbèkà	kwòòmbèkà	kùjèèŋgà, kùjúβáká
674	bull	nzàgáámbà	nzàgàámbà	nzàgàámbà	ìŋòòmbè
80	bunch (of hair)	ùmùsàsi	misàsi miiŋki	-	mànywélé
890	burden, load	mùligó	mùligò	mùlígò	mùliyó
645	burn (vt & vi)	kwàákà, kwòòsyà	kwàákà	kwàáká	kúbàká
231	burnt (become)	kùhyá	kùhyá, kùzìgá	kùhyà	kùhyá
179	bury	kùzǐìkà	kùzyǐìkà	kùzìika	kùsìikà
555	bush	ìsàlà, ìpòòlù	ìkùùŋgù	ilùùŋgù	isàlá, isiyò
21	buttermilk	mùlìbòtò	-	mbòβòtò	màbéélè
514	buttocks	ihèéndè	ihèéndè, itàkó	iβùúnù/màβùúnù	itákó/màtàkò
301	buy	kùgùlà	kùgùlà	kùgùlà	kùyùlà
873	calabash	sisyààbò	sisààβò	chìsààβò/βìsàáβò	lùsiiŋgi/nsiiŋgi
857	calf of the leg	mfúúndò	mùfùúndò	èmfùùndò	kàsàfù
877	calf	ndàmá	ndàmá	èndámà	-
31	call	kùlàáŋgà	kùlàáŋgà	ètánà	kwiitá
675	canoe (dug-out)	βwàátò	βwàátó	βwàátò	bwàátó
602	canoe	βwàátò	βwàátó	βwàátò	bwàátò
993	carry a child on the back (in a blanket)	kùhèékà	kùhèékà, kùtègúlà	kùhèèkà	kùhèèkà

No	English	Si-Sùúmbwà SìSilòòmbò	SiSùùmbwà SíYòòmbè	KiLòòŋgó	KiBèndè/KiTòòŋgwè
567	carry/lift on to head (take up) a heavy load	kwìítwííkà	kwìítwííkà	kwìítwèèkà	kùtwáálà mùlìyó, kwìítwíkà
97	carry astride on the hip	kùtèèŋgólà	kùtègúlà	kwèèlèkà	kùlèlà
560	carry, take	kùβòósyá	kùtègúlà	kùtégùlà	kùtwáálà
578	carry, convey	kùfîlá	kùβòósyà, kùtègúlà	kùtwàálà	kùfèlà
104	cat	nyàábù	nyàámù	ènyàámù	kányáù
286	cattle	mìtùgó	-	mìtúgò	fitúúŋgwá, ìŋòòmbè
486	cease, finish	kùmàlà	kùmàlà	kùhwá	kùhwá
526	centipede	lùbùbì	nzùmààlì	lùβùβi	-
247	change, turn round	kùpilòsyà	kùpilòkà	kùpilùkà	kùhíndùkà
334	charcoal	màkàlá	màkàlá	ikàlá/màkàlà	ikálá/màkálá
963	charm (esp. to ensure wife's fidelity) (n)	kúgòòŋgòòlà (v)	-	-	βùyàaŋgà
32	chase (away)	kùbìiŋgà	kùβìiŋgà	kùliíndà	kùβìiŋgà
515	cheek	ìtàmá	ìtàmá	ìtámà	ìtàmà
92	cheerful (become)	kùyègá	kòsìtìmà	kùkèrùkà	kùsááŋgáβálà
106	cheetah	ìmòóndó	-	-	-
585	chest	sífùbá	sífùβá	chìfúβà	ìtùúndú
672	chest (of animals and birds)	sídáli	sídáli	chìdáli	ìtùúndú
431	chief, headman	mùkùlú	mwàànáŋgwà	mùkùlù	mwààmì, mùtwàálè
431a	chief	mwàámi	mwàámi	mùkámà	mwàámi
679	child, infant	mùkékò, mwáánà	mwáánà	mùkékà, mwáánà	mwáánà
597	child, offspring	mwàánà	mwáánà	mwáánà	mwáánà
886	chin	kàsàkù	kàsàkù	chìlèzù	kálèfù
83	choose	kùchàágùlà	kùchàágùlà	kùtóólà	kùsàáyùlà

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
109	civet cat	ntùùŋgò	-	èèntùùŋgó	lìikéjè
255	clan	βùkóó ?	βwòòkó	βwòòkò	mùyànà
841	climb, ascend	kùgègèlà	kùgègèlà	kùhànàmà	kùtàándá
550	clod, lump	itòòŋkó/màtòòŋkó	itòótò	ikòòtè	bùlóóŋgò
851	close (the eyes, mouth, etc.)	kùhùmìlìzyà, kùzìbìlà	kùvìgà mìinsó, kùfùùndìkìlà mùlòmò	kùhùmìlìzá mènsò, kùβúúmbà mùnwà	kwìiyàlà
299	cloth	sìtàámbàálà	sìtàámbàálà	chìtàámbàálà	sìtàámbàlà, mwèéndá
235	clothe	kwàámbìkà	kwàámbìkà	kùzwéékà	kùfwìíkà
300	clothes, material	mwèèndà	mwèèndá	mwèèndá/myèèndá	mwèèndá/myèèndá
305	cloud	màlùùndè	ilùùndè	ilùùndè	ìkùúsì/màkùúsì
817	coagulate	kùgàándà	kùgàándà	kùgàándà	kùyàándà
941	cobra (spitting)	mfiílà	mfwìílà	lwíílàgùzù	swìílà
906	cohabit	kwìlàálà	kwììgèmà	-	kwìikàlà hámwì, kùsùùmbàkàlà
465	cold	mpèhó, βàlílí	mpèhó	βàlílì, mbèhò	mpéhó
624	come	kwìizà	kwìizà	kwìizà	kwìisà
505	come on suddenly, take in the act	kùbàdà bùsyííhyà	kùsàáŋgìlìzyà	kùsàáŋgìlìzà	kùnyìyà bùsìihá
230	construct, put together	kùbèézyà	kùβèézyà	kùkólà	kùbóómbá mìlóóndè, kùjúβákà
471	cook	kùtèékà	kùtèékà	kùtéékà	kùtèékà
557	cook in water or fat	kùpògòmyà	-	kùβizà	kùtèékà, kùtòkòsyà
43	cooking pan, small	sìkàlàáŋgò	-	nyùùŋgù	-
385	cool (become); get well	kùhòlá	kùhòlá	kùhòlà	kùhòlá
265	copper, brass	nshàbà	-	-	-
283	copy a pattern	kùlìŋgìísyà	kùgèmèèkèzyà	kùtólèlèlà	kùjìjííŋgànyà
894	cork, stopper	kìzìbìsyò	sìzìβó	-	m(ù)fúndílò

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
52	corpse, carcass	mùtùùmbááŋgà	mùtùùmbí	mìtúúmbì	mùlàámbò
1001	corpse (human)	ìmàítì ?	mùtùùmbí	mùtúúmbì	mùlàámbò
383	cough (vi)	kùkòlólà	kùkòlólà	kùkólòlà	kùkósólá
4	count	kùpèètà	kùpèètà	kùpèètà	kùpàándà
100	country (our)	ìnsì yíítù	nsí yɪ̀ɪ̀tʊ́	èènsì yéétù	ìnsí
14	courtyard	lùbúúgà	sìβáánzá	lùβùgà	ibáánjá, sibáánjà
852	cover (up)	kùfùndíkílà	kùfùùndìkílà	kùfúúndíkìlà	kùfíímbìlà
285	cow	ŋòòmbè	ŋòòmbè	èèntè	ìŋòòmbè
1003	coward	mwòòβá	mwòòβá	mùtííní	mwóóbá
335	crab	-	-	-	-
520	crawl, creep	kwààvùúlà	kwààvùúlà	kwáázùùlà	kùsyèèlèkà
612	cricket	sìfùùlà/bìsìfùùlà	nàànzélélé	nyèènzè	nyéénsé
153	cripple	mùlèmá	mùlèmá	mùlémà	mùlèmá
803	crocodile	màámbá ?	nsàámbí	ènsàámbì	ŋgwèènà
319	cross (a river)	kùtàámbòkà	kùtàámbùkà	kùtáámbùkà	kùɣàmbùkà mwóóŋgá
846	crow (n)	mbàgá	βàágà	βàágà/βàágà	-
308	crown of the head	lòtòótò	βwòòtóótó	lwòòtótò	lùtòósì
79	crumple	kùhìnááhìnà	-	-	kùbúlùŋgánya
370	crush by pounding, pulverize	kùsèkúlà	-	kùsígìnà	kùtwá
393	crust	ŋkòkòtwá	ŋkòkótwà	èèŋkógòtò	-
160	cry, wail	kùlìlà	kùlìlà	kùlìlà	kùlìlà
966	cucumber, small	màálíímbè	màhìtì	màlíímbè, βòlíímbè	mùtànà
736	cudgel	βùhìlì	βùhìlì	βùhìlì	iɣóóŋgò
165	cultivate	kùlìmà	kòlìmà	kùlìmà	kùlìmà
950	cure, cool, heal	kùsíínsyà	kòhòzyá	kùhòzà	kùsìsyá <kùsìlá
355	cut	kùkàtá ?	kùtèmá	kùnógòlà, kùtémà	kùpùtá, kùpùtùlá
98	cut, lop	kùpùùŋgúsyà	-	kùtùútùùlà	kùpùtùlá

No	English	Si-Sùùmbwà SiSìlòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
117	cut to shape, sharpen to a point	kùbèèhyà	kùsòòŋgòlà	kùtùútùùlà ?	kúβààsà
365	dance (of men, to show courage)	kwìgàámbà	-	kwiíβùgà	kùkìná
53	dance	kwiisyinià ŋgómà	kùtùùmà ŋgòmà	kùnégùlà	kùkìná
622	dark, black	-pì, βwiilàbùlé	lyéépi	kwiilàgùlà	-fiitilé, -fiité <kùfiità
481	darkness	lizimâ	giiti	ènziimbàázi	bùfùkù wápî, bùfiité
824	dawn (vi)	kùsyà	kùsyá	kùchà	kùsyá
359	dawn, daybreak	kùsyà	ìkéèsì	kùchà	hàmwiisà kùsyá
744	day after tomorrow	màzòòlì	màzòólí	izwèéli	lwiisyé lúúndí
130	day	lòsìkú	lòsìkú	chílò	lwiisyé
682	day-time	mwìzyòòbà	mwìzyòòβá	ihàáŋgwè	ìsòòβá
869	day (all)	lùsìkù lwòòná	ìzyòòβá dwì	chíló chòóná	lwiisyé lóónsè
751	day before yesterday	màzòólí	màzòólí	ìzwèéli	lwiisyé lúúndí
423	dead person	mfiilè	múfwíilè	mùtúúmbi	mùntù àfwiilè, mùlàámbò
424	death	lòfù	lòfù	lùfù	sìfó
931	decorate	kùpàámbà ?	-	kúliiŋgànizà	kùpàámbà ?
446a	defecate	kùnìà	kùnìà	kúnìà	kùnìà
631	denial	kùkèmá	múkémó	kwàáŋgà	kùtúná
821	deny	kùkèmá	kùkémá	kwàáŋgà	kùtùná
648	destroy, spoil	kùsìisà	kùsíisà, kùβìihyà	kùβíihyà	kùyònóónà
437	dew	lùmè	lùmè	lòmè	lùmáándè ?
219	die (cause to); put to death*	kwíítà	kwìitá	kwíítà	kwihàyá
1027	die *	kùfwá	kùfwá	kùfwà	kùfwá
425	die	kùfwá	kùfwá	kùfwà	kùfwá
504	dig up, dig out	kùsíimbòòlà, kùfùkòòlà	kùzyòólà	kùziikùùlà	kùfúlúúlà
503	dig	kùsìimbà	kùsìimbà	kùsìimbà	kùsàβá

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
466	diminish, grow less	kwòòndà	kùpùùŋgólà	kùkéhà	kùpúúŋgúkà
635	dip	kùsòfyà	kùsòòmvyà	kùkózà	kùtwéésyà
49	dirt	màtàkàlà, bùcháfù ?	màtàkàlà, βùcháfù ?	ùkó/mákò, bitàkàlà	bùchááfù ?
680	district, province, country	nsì (yìítú)	nsì	èènsì	sihùɣó
245	divide	kùgàbàànùlà	kùgàβà	kùgàβà	kùɣàβàányà
512	divorce	kùbiiŋgá, tàláká ?	kùβiiŋgà	kùlèkàànà	kùlèkànà
367	do, complete, finish	kùmàlà	kùmàlà	kùmàlà	kùhwá
366	do	kùgèmà	kùgèmà	kùzìlà	kwíílà
60	dog	mbwá	mbwá	éémbwà	iimbwá
292a	donkey	ndògòbé	nzòβé, mpùúndà	èèndògóβè	-
685	door	mùzìgó	mùzìgó	mùlyàáŋgò	lwiiβi, mùlyàáŋgò
415	dove (red-eyed)	ŋkùùndyà	ŋkùùndyà	èŋkùúndyà	ŋkúúndà
188	doze	kùgònà	kùgònà, kùtìindílà	kùtííndìlà	kùsìinsìlà
529	draw water (from well)	kùtàhà (miinzi)	kùtàhá (miinzi)	kùtáhá míínzi	kùtàhá màànsí
215	dream (vt, vi)	kùlòòtélà	kùlòòtélà	kùlóótà	kùlóótà
328	dream (n)	kùlòótà, mùlòòtélò	mùlòòtélò	chìlóótò	-
448	drink	kònwá	kòŋwà	kùnywà	kùnywá
196	drizzle	lònàànàgálà	mànàànàgálà	lùnyàànyàgálà	kùnyáɣálá
780	drop, throw down	kògwìisyà	kùhàáŋgòòlà	kùtáβùlà, kùhàáŋgùùlà, kwááhà	kùgwìisyà
284	drum	ŋgòmà	ŋgòmà	èèŋgòmà	iiŋgòmà
598	dry (vt), set out to dry	kwàànikílà	kwàánikílà	kwáánikílà	kùɣáníká
346	dry	nòòmú	lyòòmú	bwòòmè	-gúmílé <kùgùmá
954	dry up, ebb	kwòòmá	kwòòmá	-	kùhwá
345	dry up, become dry	kwòòmá	kwòòmá	kwòòmà	kùhwá

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
289	duck	mbàátà	mbàátà	èmbàátà	iβàátà/màβàátà
243	dust, cloud of dust	lòbùúbú	lòβùúβú	lùβùúβù	lùfùúndú/màfùúndú
628	dwell	kwiikàlà	kwiikàlà	kwiikàlisà	kwiikàlà
492	eagerness, zeal	bwàáŋgùbwàáŋgù	βwàáŋgùβwàáŋgù	mèèlù, kùhúlúgùtà	bwàáŋgùbwááŋgù
491	eagle, bird of prey	mbèèsì	mbèèsì	ŋkóónà	ìpúúŋgú, ìisáánsà
563	ear	kùtwí	kùtwí	kùtwì	ìtwí
70	earth, land	nsí	nsí	ènsì	bùlóóŋgò
44	earthenware vessel for serving up food	lòlàáŋgàhè	-	chìsèmè/visèmè, ènyùúŋgù	sìlíílò
156	eat	kùlyá	kùlyá	kùlyà	kùlyá
900	effort, exertion	ŋgùzù	ŋgùzù	kùhátikà	kùkálàámbànà
273	egg	ìgì/màgì	ìgì/màgi	ìyáàyì/màyáàyi	ìjí/màjí
443	eight	mùnàánè	mùnàánè	mùnáánè	mùnáánè
705a	elbow	ikòòkólà	lùkòòkóólà	lùkókòòlà	kàsùkúúmpã ?
329	elephant	nzòvú	nzòvù	ènzòzù	ìnsòfù
336	embers	ikàlà lyè múlílò	ikàlà lyé múlìlò	ikàlà lyó mùlìlò	ikàlá lyá múlílò
842	embrace	kùbùùmbilílà	kùbùùmbìlílà	kùbúmbìlà	kùkúkútílà
394	end (come to an), cease	kùhìkà mwiisyò	kùmàlà, kùlèkà	kùlèkèlà	kùhwá
952	escape, recover	kùsìlà	kùsìlá	kùchìlà, kùpùlúgùkà	kùsìlá
899	examine, measure, test	kùpìimà	kùgèmà, kùpìimà	kùpìimà	kùpìimà ?
45	excrement, dung	màámví	màámvi	màzì	ifí/màfí
958	exorcise, drive out a devil	kùkùúŋgùúlà	kùβìiŋgà, kùkùúŋgùúlà	kùkùúŋgùúlà	kùpùúŋgà
784	explain	kwiiyèlèézyà ?	kùtèèmbùúsyà	kùtéémbùúchà	kùlàáŋgìsyà, kùlàánsyà
620	eye	liinsó/màásyó	liinsó/miinsó	liinsò/mèènsò	liinsó/méénsó
828	eyebrow	ŋkòhé	-	màsígà	-

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
838	eyelash	ŋkòhé	ŋkòhé	èŋkóhè	ŋkóhé
587	face downwards	kàvùmà	lààmbàlàlà	kùβùúndààlà	kùláálà
686	face	βòsyò	βùsyó	βúsò	bùsyú
940	fade, disappear	kwèèlòkílwà	-	kùhwéélélà	-
891	faint, lose consciousness	kùhòlà	-	-	-
298	fall	kùgwà	kùgwà	kùgwà	kùγwà
549	fall short	kùpóóŋgùlà	kùlèβà	kùlèβá	kùpóóŋgóká
462	fan, wave	kùpèpéélà	kùpèpèélà	kùhùùhilà	kùhéhémúlà
764	far	hàlè	hàlè	hàlè	kùlè
921	fat (be) (of animals)	kùginà	kùginà, kùnòlà	kùnùlà	kùhàmà, kùnònà
922	fat (of animals)	inòné	-nòlé	-ànùzílè	inónilé, -hàmú
531a	father	βàáβà	βàáβà, dàádà	táátà	tàátà, tàátá búsyà, tàátá
382	father-in-law, mother-in-law	bàá-/màá bùkwè	tàátà-/màá βòkwè	sínyizàlá, máhàzàlà	tàátá/màámá búkwè
531	father (my)	βàáβà	βàáβà, dàádà	táátà	tàátà, tàátá
687	fear	kwòòbáhà, βòòβá	βòòβá	βùtíni	bóóbá
652	feathers, fur	màzòzá	màzòòzà	βwòòyà	màfùùmbú, inyèlé
848	fence, enclosure	lògó	lògó	lùúβà	lúúβà
858	ferment, turn sour	kùgàásà	kùgààsà	kùgàgà	kùsàsà
762	few (a), not much	tùdó	ndó	bichè, bikè	-sé
757	fierce, sharp	mùlàámbé	βùsòòŋgòké	βwòògì	-kàlí
421	fig-tree	-	-	-	-
422	fig-mulberry tree	mùkúyù	-	mùkúyù	-
216	fight	kùsòòlà, kwìihúúlà	kùsòòlà	kùlwàànà	kùsòòlà
804	fill	kùkàzyà	kwòòkázyà	kwíízùzà	kùbúúmbá
176	fill a hole, stop up	kùzìβílà	kùzìβìlà	kùzìβílà	kwìiγàlà
583	filter, strain	kùswìizà	kùswìizà	kùswìizà	kùsùùsà

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
50	filth	màtàkàlà	màtàkàlà	bìtàkàlà	bùchááfù ?
516	final, decisive	kùlàámùlà	-	-	-à há mwìisyò ?
760	fine, excellent	-sògá	-sógá	kùzìmà	sòɣá
447	finger	mùnwè	mùnwè	lùkúmù	kàkúmó/tùkúmó
323	fingernail	lyàálá	lyàálá	lyàálà/màálà	lùsálá/nsálá
474	fire	mùlìlò	mùlìlò	mùlìlò	mùlìlò/mìlìlò
280	fireplace, hearth, kitchen	ìzìikó	ìzìikó	ìhìgà	ìfíyá/màfíyá
970a	firewood (collect, cut) (vt)	kùsèénà	kùsèénâ	kùsèènyà	kùtèmá ŋkwì
413	firewood	ŋkwí	ŋkwí	èéŋkwì	ŋkwí
191	fish up, pull out	kùlòβòólà	kwiihùlà	kùzòmòòlà	kùsàáβùlà
126	fish (old Swahili *nswi*)	mfwí, nsàmàákì ?	mfwí	èémfwì	ìséémbé/màséémbé
190	fish (vt), trap fish	kùtègá	kùtègá mfwì	kùlóβà, kùtègà	kùlóβá
400	fist	ŋgùúmì	ŋgùúmì	èèŋgùúmì	ŋgúmì ?
525	five	ìtàánò	ìtàánò	ìtàánò	ìtàánò
493	flap wings wildly, flutter	kùpèpèélà	kùpàpàmìlà	kùpàpàmìlà	kùpùpùmùkà
832	flatulence	kùvìmbéélwà	kùvìmbèélwà	kùzìimbèèlwà, kùhìhà	kùfíímbíílwà
384	flavoured (be properly)	kùkwàátà	kùkòlèélà	kùhìkà	kùjóɣá
907	flower	ìùà ?	ìúà ?	ìláβò/màláβò	ìùà/màùà ?
278	fly (house)	nsàázì	nsàázì	ènsòhèlà	lùsáásí/nsààsì
1028	fly (vi)	kùgùlùkà	kùgùlùkà	kùgùlùkà	kùɣùlùkà
1032	foam *	ìfùló	ìfùló	ìfùló	ìfùló/màfùló
502	foam	ìfùló	ìfùló	ìfùló	ìfùló/màfùló
143	follow (in order)	kwìlòòndézyà	kùlòòndà	kùkúlàátìlà	kùlòòndèlà, kùhélékélà, kùhélékésyà

No	English	Si-Súúmbwà SiSilòómbò	SiSùùmbwà SiYòómbè	KiLôôŋgô	KiBèndè/KiTòòŋgwè
142	*follow*	*kùlòòndèlèzyà*	*kùlòòndèzyà*	*kùkúlàátìlà*	*kùlòòndà, kùlòòndèlà*
823	food supply for a journey	mpàámbà	mpàámbà	èmpàámbà	mpàámbà
556	forest	ipòólù	ikùùŋgú	*ilùùŋgù*	*isàlá*
584	forge	kùhèésà	kùvùgùtà	kùhéésà	kùsùlá
889	forget	kùlàβílà	kùlàβílà	kwèèβwà	kùlàβílílà
458	fork, bifurcation	nsàágà	nsàgà, ipàándá	*èŋsàgà*	*ihàándá*
442	four	ínè	ínè	ínè	íínè
295	frog	lyòólà	lyòólà	ikélyè	kàsáβà
574	fruit	nsùùmò	-	*isùmò, βùsùmò*	*iyàβò/màyàβò*
349	fry	kùkàlàáŋgà	kùkàlàáŋgà	kùkálàáŋgà	kùkàlááŋgà
936	fully developed, be	kùkùlá	kùhyá, kùkòmèélà	kùkómèélà	kùkùlá
625	full (become)	kwòókálà	kwòókálà	*kwiinzùlà*	*kùbúúmbikà*
316	garden	bùsitàáni ?	-	βùsitáání ?	bùsitáání ?
419	gather (flowers, fruit)	kùyàhà	kùyàhà	kwàáhà	kùsèsá ?
91	gathered (be), assembled (be)	*kwiilùndikà*	-	*kùkòβèlà*	*kwiisà hámwi*
368	gazelle (Grant's)	kàsyà	nsyà	èénsà	mbàβálá ?
454	gazelle, small (impala)	mùkòsè	mpàlàhálà	èmpàlàhàlà	kàsyà
108	genet (kind of speckled civet cat)	ntùùŋgò	ntùùŋgò	èntùùŋgò	likéjè, lifùùŋgò
408	get, obtain	kúpáándikà	kùpàándikà	kùpàándikà, kùβónà	kùpàtà
684	ghost, sudden apparition	isàámbwà	mùsàámbwà? mùzùùkà ?	-	isyùùkà, mùsyùùká
568	giraffe	ntwiigà	ntwiigà	èntwiigà	ntwiiyà
246	give away (present)	kùfùùhà	kòhá	kùsáámbà	kùfùmyá, kùhá
449	give	kùhá	kùhá, kùfùmyá	kùhà	kùhá

No	English	Si-Sùùmbwà SìSìlòòmbò	SiSùùmbwà SìYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
916	give light to	kùmwòòlèkà	kùmòlèkà	kùmòlèkà	kùmùnìkà
815	glide, trickle	kùsèlémà	-	kùgèlà	kùsòòβà
269	go	kùzyà	kùzyà	kùgèèndà	kùjà
639	go in, come in, enter	kwìíŋgílà	kwìíŋgílâ	kwìíŋgìlà	kwìíŋgílá
63	goat	mbùzí	mbùzí	èmbúzì	mbúsí, ìmbúsí
694	goat, (he-)	ŋgùlàáti	ŋgùlàáti	èntùlàgè	lìkàβòòlòβòòlò
695	god	mìsàámbwà	mìsàámbwà, mùúŋgù	nyàmùhàáŋgà, mùúŋgù	lìβwèèlèèlò
758	good	mfùlá	nsògá	màzìmá	nsògá
388	goshawk (East African) (*Astur tachiro*)	sùŋgùsèélyà	màlèèlé	ìnàándà	lìsáánsà
68	grain (of cereal)	kàzùmó	nzúmà, lùzùmà	lùzùmá	sìsáká, mbùtó
696	grandfather	gòókò	gùúkù	gùúkù	kúúkù, sò/tàátákúlú
697	grandmother	màámà	màámà	kàákà	kúúkù, nyòkòkúlú
432	grasp, hold in arm	kòkwàtílìlà	kùkwàtìlílà	kùβùúmbìlà	kùfúúmbátá
698	grass, reeds	mànàánsì	mànàánsì	mànyàánsì	máβánò, bwàásí
406	grate	kòkwàátólà	kùkwààlùlà	kùkwáálùlà	-
409	great, powerful, big	mùkòlò	ŋkùlú	ìhááŋgò	-kùlú
164	grief, sorrow	-	-	kùhólòlòkà	ŋkúúmbú, nyúúmbú
371	grind (grain with a millstone)	kùsyà	kùsyà	kùsyà	kùsyà
372	grind coarsely	kùsigínà	kùhàlàlà	kùhàlàgà	kùhàlàlà
212	groove, furrow	ìhìsyó	ŋkòlóómbìlwà	-	-
801	ground, cultivated	mùgùùndá	mùgùùndà, ìlàálé	ènsàámbò	ìβàlà
405	grow up, get large, become great	kòkòlá	kùkùlá	kùkúlà	kùkùlà
913	grow (of plants)	kòmèlà	kùmèlà	kùmèlà	kùmèlà
461	grown (be fully)	kùkòmèélà	kùkòmèélà	kùkòmèèlâ	kùkùlà

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
373	gruel, light porridge	ŋkòómbà	ŋkòómbà	èŋkòómbà	mpàná
358	grunt, grumble	kògùùnà	kùkùùnà	kùkùùmà	kùkíímà
205	guide aright	kùlàánzyà	-	kùhánà	kùlòmbòlà
351	guinea-fowl	ŋkàáŋgá	ŋkàáŋgá	èŋkááŋgà	ikááŋgá
701	gun	ŋgòòhó	ŋgòóhó	èŋgòòhò	mùndúúsì
702	hair	mùsàsì	mùsàsi	ìsòkè	nyèlé
977	hair (long straight- of animals and Europeans)	mùsàsì m(ù)lèèlé	mùsàsi m(ù)lèélé	èmbùùsì	βùjáámbá, nyèlé, βòòsá, βùsííŋgá
75	hair (white, grey)	mvī	mví	èènzwí	ŋkòté
703	hand (flat of)	ikòófì	ikóófi	ikóófi	kùβòkó
157	hand, right	kùlyó	kúlyò	kúlyò	kwèèné
439	hand (left)	kùmàsó	kùmàánsò	kùmàsò	lòònsó
476	handle, haft	mùhìní	mùhíni	mùhíni	mùhìní
779	hang in mid-air	kwìlìiíŋgá	kùsùŋgèéná	kùlèléémbà	kùlèlà
655	hard	ŋgùmé	igùmé	kùgùmà	ikàká
377	hardship, distress	màkòyé	màkòyé	èŋkùùlè	-
294	hare	nàkámì	nàkámí	nyákámi	súŋgúlá ?
781	haste	bwàáŋgùbwàáŋgù	βwàáŋgùβwááŋgú	βwàáŋgù	βwááŋgó
795	hate, detest	kùgàyà	kùgàyá	kùgàyà	kùɣàjà
700	hay	mànàánsì mòòmú	mànàánsì mòòmú	βùnyààsi	-
678	head, chief person	mùkùló	mùkúlú	mùkúlù	mùkùlú
356	head	mùtwé	mùtwé	mútwè	mùtwé/mìtwé
352	head-pad	ŋkàtá	ŋkàtá	èŋgátá	ŋkàtá
561	heap	kùlìindíkà (v)	itúúmbi, ilùùndò	ilùùndò	mùsiìŋkú, isyàálà
391	heap up, ready/set on fire	kùhèèmbá múlílò	kùhèèmbá múlílò, kwàásyá	kùhéémbà	kùlùùndìkà
623	hear	kwiimvá	kwòòmvwá	kùhúlilà	kúhùlìká

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
543	heart	mwiizò	mwiizò	mùgányà	mwèèyò/myèèyò
944	hearthstone for putting pots on	ihìgá/màhìgá	ihìgá/màhìgá	ihígà/màhígà	ifíyá/màfíyá
893	heavy, serious, dull	itìimbè	itìimbé	-tìimbà, itíimbè	inywàámú
705	heel (of foot)	nsiinsíílò	sisìinzílò, lùgèlé	chìsiínsilò	kàsíínsílá/tùsíínsílá
681	heifer	ndògòòsyà	-	ndògòòsà	-
418	hem, make a border	kùhìná	kùhìnà	kùgòòndà	kùlàándà
690	hen, fowl, chicken	ŋkòkó	ŋkòkó	èŋkòkò	íŋkókó/ŋkókó
766	here	àhànó, èyònò	àhó, èyó	àhà, ùkù	áàhà, ùkó
863	hiccup	kùsèèfúúlwà	kùsìifúúlwà	ènsíkìnyà	ŋkwííŋkwi
800	hide (vt)	kùbìsá	kùβìsá	kùsèlèkā	kùfìsá
38	high, be (of meat)	kùvùùndà	kùvùùndà	kùzùùndà	kùfùùndà
326	highway	nzìlá	ìbàlàbálà ?	ìkwèèsi, ìkùúlwà	nsìlà
309	hill	lùgùlù	lùgùlù	kàβàáŋgà	mùsòsí/mìsòsí
925	hip	mùkìŋgíílì	-	-	-
317	hippopotamus	ŋgùgùmà	ŋgùgùmà	èŋgùgùmà	ntòmóómbò
396	hit with a hammer	kùkòmàáŋgílà	kùkòmááŋgílà	kùtéélà	kùsùlá
706	hoe	mfùká	mfùká, ìgèèmbè	èmfùkà	mfùká
990	hold, arrest	kùkwàátà	kùkwàátá	kùkwáátà	kùnìyà
575	hole, nest	idùlólò	idùlúlú	chàálì	síísà/fíísà
836	hollow out	kùkòómbá	kùtèèzà ?	kùkógòtà	kùsàβà
816	home	kàáyá	kàáyá, wìítú	wèètù, múkà	kùlùyó, kù mwèètú
654	honey	bwòòsi	βwòòsì	βwóóchì	búúsí
150	honour	kùhiisímà ?	-	kùkùzá	kùkóóŋkà
797	hook (for pulling down branches in plucking fruit)	ìnànùùzilò	ìnànùùzilò	ndóβànò ?	-
189	hook (fish)	ndòbánò	ndòβánò	ndóβànò	ndòβáánò ?

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
707	horn, ivory, tusk	ihèèmbè	ihèèmbé	ihéémbé	ihéémbé lyá nsòfù
288	horse *	mfálàásì ?	-	-	
708	house	nùúmbà	nùúmbà	èènzù	inyùùmbá
263	how many?	nì zííŋgà	ziíŋgà	ziíŋgá	fííŋgáá
572	hump (of hunchback)	-	-	lùtùúmbi	-
573	hump (of cow)	ibàáŋgò	iβàáŋgò	ìβàáŋgò	
756	hundred	igànà	igànà	igànà	imyà ?
320	hunger	nzàlà, bùtàmò	nzàlà, βùtàmò	ènzàlà	nsàlà
33	hunt	kòhìígà	kùhìígà	kùhíígà	kùhííyà
34	hunter (professional)	mùhìízì	mùhìízì	mùhíígì	mùhííyì, fúúndí hà nyàmà
35	hunting	bùhìízì	kùhìígà, mùhíígò	βùhíígì	kùhííyà
227	husband	mùlùmé	mùlùmé	ìβà	ibá, ìbáné, ìβàló
808	hut	nùúmbà	siβàándà	kàβàánzà	nyùùmbá, mùyàándá
709	hyena	mfisí	mfisí	èmpisì	itáná
1016	I	ònè	ònè	ìnyè	ùùnè
1013	idleness, sloth	bùzòbé	βùzòβé	βògósè	bùfílà
901	ill (be); groan	kòlwàálà	kùlwàálà	kùlwáálà	kùlwáálà
902	illness, (crippling)	bùlwèèlè	βúlwèèlè	βùwéélè	βùlwéélé
275	imitate	kwìibílà	kwìigèméékèzyà	kùtòólèlà	kùjíjíŋgányà
16	in front of	bùtòònzí	kùβòtòònzí	βòtòóŋgì	kùùmbèlè
353	in the middle of	hàkàtí	hàkàtí	hàgátí	hákàtí
118	incite	kùgàŋgóósyà	kùsàmìlíkìzyà	kùsámìlìzà	kùsòònsyà
206	increase, make greater	kùkùzyá	kwòòŋgèzyà	kwòòŋgèzà	kùgùŋgìlisyà
155	increase	kòkìlá	kùkìlá	kùchílàànà	kùkúúmbíká, kùkúlá
426	inheritance	ìsàálò	-	-	kùhyáánà, vìsàánsò
542	inside, in	mùkàtí, mùnùúmbí	mùkàtí	mùgátì, mùùnzù	mùkàtí
353a	inside, middle	mùkàtì	hàkàtí	hàgátì	hàkàtí

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwá SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
132	intestines	bùlà	βùlà	βùlà	màlà
389	intoxicated (get)	kùkòlwá	kùkòlwá	kùtàmìílà, kùkólwà	kùkòlwà
513	iron ore	màbàálè sè syòómá	-	màβáálè	-
264	iron	syòómá	syòómá	chòómà	ijélà/màjélà
710	island	iziiŋgá	-	iziiŋgà	màándà (KiFipa)
2	itch	kùβàbá	kùβáβá	kùβáβà	kùbábá
460	jammed (become)	kùhàtá	kùhágá	kùhágà	kùhágámá
853	jaw (bone)	milàámbó	mìlàámbó	èèmbà	-
960	jealousy	ibùúbá	iβùβá	iβùβà	ìbùβà
271	journey	lùgèèndò	lùgèèndò	lùgèèndò	lwèèndò/nyèéndò
606	judge (vt)	kùlàmùlà	kùlámùlá	kùlámùlà	kùjááŋgúlà
810	jump, leap	kùgùlùkà	kùgùlùkà	kùgùlùkà	kùgùlùkà
477	kidney	mfigó	mfigó	èènsígò	mfigó ?
218	kill	kwìítá	kwìítá	kwìítà	kwìhàáyà
677	king	mwàámi	mwàámì	mùkámà	mwàámi
787	kite	màlèélè	màlèèlé	inàándà	lisáánsà
347	knead	kùkàándíkà	kùtòβà	kùkàándà	-
348	knee	sivi	sivwí	chizwì/mázwì	ijùùŋgò
427	kneel	kùsìkà sìvì	kùsìkà vívwi	kùtèélà βizwì	kùsúkámá, kùsíkámá
607	knife	mwàámbì	mwàámbì	músyò	kàámbì/twàámbi
402	knife, thin, curved, broad-bladed	ŋgòòŋgò	lwiihyó	múhólò	ŋkòtàmì
704	knot	kìbàlísyò	igùúndó	ifùùndò	igúúndó
626	know	kùmànìà	kùmànià	kùmányà	kùmányà
178	lake	nyàánzà	nyàànzà	ènyàánzà	isiβà
151	lame (be)	kùsùùntá	kùsúúntá	kùchúúntìlà	kùsúúntá
511	lamp	tálà	tálà	èèŋkàánzi	mwèèŋgè, kàmùni
99	land (dry)	nsí nyóómù	nsi nòòmù	èènsí	insí

No	English	Si-Sùùmbwà SiSìlòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
761	large, great, big *	ŋkòlò	ùkùlú	ìhàáŋgò	ìkòlő
94	laugh	kùsèkà	kùsèkà	kùsèkà	kùsèkà
792	lay over on one side	kwàànikílà	kùsèèndàmìkà	kùhéŋgèkà	kwíínàmìsyà
1000	lazy	mùzòbé	mùzòbé	mùgósè	mfílà
699	leaf, blade of grass	màtùùtú	ìtùùtú	ìβàβì/màβàβì	ìyáányí/máányí
1025	leaf (tree)	màtùùtú	ìtùùtú	iβàβi/màβàβì	lyáányí/máányí
911	leak, ooze out	kùvwà	kùvwà	kùzwà	kùsóóβà
96	lean, bend down, slope	kwìínàmà	kwìínàmà	kùgòòŋgòmàlà	kwìínàmà
536	lean on, rely on	kwìízìgízyà	kwìízìgízyà	-	-
796	lean, become; grow thin	kwòòndá	kwòòndá	kwàánùkà	kùɣóóndá
535	leaning (be)	kwèègámílà	kùsèèndàmà	kùsèéndàmà	-
613	learn	kwìílàánzyà	kwìílàánzyà	kùégèsà	kwìífúúndíísyà
546	leave, permission	lùhúsà ?	-	kùlàgà	lùhúsà
1011	leave over	kùsàázyà	kùsàázyà	kùsáágyà	kùlèkèlà
547	leave, go away	kùzyà	kùzyà, kùβùúkà	kùgèèndà	kùbúúkà
544	leave (off)	kùlèkà	kùlèkà	kùlèkà	kùlèkà
975	left over, (be); remain over	kwìíkálà, kòsìígálà	kùsìígálà	kùsáágyà	kùsìíβà
310	leg, foot	kùgùlù/màgùlù	kùgùlù/màgùlù	kùgùlù/màgùlù	kùɣùlù/màɣùlù
774	lend, borrow	kùkòpà	kùtìízyà	kùtìízà	kùtìílà
107	leopard	ŋgwè	ŋgwè	ènzùmúlà	ìíŋgwè
878	lick (vt)	kùlàámbá	kùlàámbá	kùláámbá	kùláámbá
134	lie down	kùgònà, kùlàálà	kùgònà	kùlyáámà	kùláálà
250	lie on one's back	kùsàáŋgálàlà	kùsàgàlálà	kùgàlàmà	kùláálá kànságà
791	lift up, pick up	kùbùúsyà	kùβùúsyà, kwìínúlà	kwìímùchà	kùbùúsyà
467	light in weight	mpùùpé	ipʊ̀ʊ̀pé	-pùùpè	ìlèlé

No	English	Si-Sùùmbwà SiSílòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
304	light, sky	ilùúndè	ilùùndè	igùlù	ìyùlù
805	lightning	bùmèmè ?	bùmèèmè ?	èèŋkúβà	ŋkùβá
657	lime, whitewash	chòkáà ?	nsyàŋkálá ?	chòòkáà ?	chòòkálà ?
213	line, row	mùsìtàáli ?	mùsìtàáli ?	mùsìtááli	mùsìtááli ?
659	line, fishing	msùipi ?	lùgè	mùhúzò/mìhúzò	kàjè, mùɣìlà
103	lion	ntàálè	nsiímbá	èèŋgàànzà	insìímbá
198	lip	mùlòmò	mùlòmò	mùnwà	mùlòmò/mìlòmò
956	listen	kùwòkìlízyà	kùdègèlékà	kùhùlìkìzà	kùhùlìkìsyà
972	listless (be)	bùtótè	-	kùlèmbùúkà	kùtèpètà
1024	liver	ìtìmá	ìtìmá	ìtìmà	ìtìmá
429	livestock (keep)	kòtùùŋgá	kùtùùŋgá	kùtùúŋgà	kùfùɣá
819	lobster	-	-	-	-
794	locust	nzìgè	nzìgè	èènzìgè	-
155a	long (become)	kùbùlèélè	kùlèèhà	kùlèéhà	kùlèèhà, kùkùlà, kùsùùmbà
144	long	bùlèèlé	ìlèèlé	ìlèélè	ìlèéhé
131	look after, care for	kùlèlà	kùlélà, kùtùùŋgá	kùlééβà	kùtùùnsyá, kùgáŋgálílà
871	look after grazing cattle, help a sick man on the road	kùdìimà	kùdìimà	kùlíísà, kùdìimà	kùkémá
354	look at, examine	kùlìiŋgá	kùlòlà, kùlìiŋgìlílà	kùlèèβà	kùlòlà
354a	look around	kùlìiŋgá	kùlòlà	kùlèèβà	kùhéénsá, kùlòlà
200	look for, hang around (to get something), pursue	kùsèèβèèlà	-	kùlyáámìlílà	kùpùlà
973	loose (be); faint, weak	kùdèdà	kùlògòyà	kùlèmbùúkà	kùlègèjà
181	lost, get	kùβùlà	kùβùlá	kùbúlà	kùtáágìkà
1023	louse	ndá	ndá/ìdá	èèndà	ìindá

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
769	love, want	kùsiimà	kùsiimà	kùsìimà	kùnyómwá
934	lung	màhàáhà	ihàhá/màhàhá	ihàhá/màháhà	ìpóómbò/màpóómbò
713	magic *	bùlòzi	bùlòzi	βòlògi	βùlòsi
714	maize	mùhìindì	mùhiindì	ìpò	sìsàká/fisàká
521	make offerings to the dead	kùlàβùùlúlà	kùtàámbíkà	kùtàámbìikà	kùpéélà
226	male	ìgòósyá	ìgòósyá, mùgòósyá	isèèzà/màsèèzà	ŋgòòsi
10	mamba, green (kind of poisonous snake)	nyàlùtùútù	-	éèŋkòβòkò	ŋkóβógó
793	many	-iiŋkí	-iìŋkí	nyííŋgì	-ìiŋgí
1019	many *	-iiŋkí	-iìŋkí	nyííŋgì	-ìiŋgí
897	marriage	kùswèélà, kùtòólà	βùswéézi	βwèéŋgà	bùtóósi
895	marry (of man)	kùswèélà	kùswéélà	kùswéélà	kùtóólà
896	marry (give in marriage-of parents, priests)	kùswèézyà	kùswéézyà	kùsìigà ?	kùtóósyà
814	master	mwàámì ?	-	-	mùjááŋgò
888	match, harmonise (vi)	kwìigànìlà	kwiiŋgànà, kwiiŋgànilà	kwìiŋgànà	kùlìiŋgànà
935	mature	kùkòmèélà	ikòméélé	-kòmèèzílè	ŋkùlú, inyhé
596	meat	nàmà	nàmà	èèŋyàmà	ìnyàmà
259	medicine, remedy	bùgàáŋgà	βùgàáŋgà	mùβázi	bùyàáŋgà
260	medicine (art of medicine man)	bùfùmù, kùlàgùlà	βùfùmù	βùlàgùzi	βùfúmù
261	medicine-man	mùfùmù, mùlàgùzi	mùfùmú	mùfúmù	mùfùmú/bàfùmú
90	meet	kùsàánìà	kùsàáŋgà	kùsàáŋgà, kùβúgànà	kùsàáŋgà
861	melt	kùyèyùkà ?	-	kùhwèèèlèlà	-
845	midwife	-	-	mùfúmù	-
859	migrate, move away	kùfùlùùkà	kùfùlúkà	kùfùlúkà	kòtóólókà

No	English	Si-Sùùmbwà SìSilòòmbò	SiSùùmbwà SìYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
1030	milk (n)	màbèélè	màβèélè	àmátè	màβéélè
20	milk (curdled), curds	mùlibòtò, mùlìmbòòtò	-	mbòβòtò	-
19	milk, (fresh) (n)	màbèélè, màsùkâ	màsùúŋgà	àmátè	màβéélè
903	millet (bullrush)	bùsigá	βùsìgá ?	lùβélè	nsàká/màsàká
290	millipede	igòòŋgólwà	igòóŋgólwà	igòlòŋgólyò	-
73	mix (ingredients, `season food')	kùlùùŋgá	kùlòòŋgá	kùtúlàànìzà	kùsàànsyà
72	mix, put together	kùsàànzyà	-	kùtúlàànìzà	kùsàànsìkànyà, kùsàànsyà
363	monkey (small lightish-coloured)	ŋkèéndé	ŋkèéndé	èèŋkèèndè	ìjáándá/màjáándá
362	monkey (colobus- (with long black silk hair, white on shoulders)	ŋkèéndé	-	-	-
361	monkey (small, dark-coloured)	ŋkèéndé	ŋkèéndé	èèŋkèèndè	-
716	moon	kwèèzì	kwèèzí	kwèèzì	mwéénsí
609	moonlight	kwèèzì	kwèèzí	kwèèzì	kùmwéénsí
59	mosquito	mùβú/miβú	mùβó/miβó	múβù/míβù	kàlàámbà/tùlàámbà
436	mother	yàáyò/màáyò	yàáyò/màáyò	mááhà	máájò/bàmáájò, máámà
65	mould (pottery)	kùbùúmbá	kùvùúmbá	kùβúmbà	kùbúúmbá mílòòndè
717	mountain	mùgálà	mùgálà, lùgùlù	ìβàáŋgà	mùsósì/mìsósì
163	mourning	nàkú	nàkú	lùfù	sìlìlò/fìlìlò
1026	mouth	mùlómò	mùlómò	mùnwà	mùlómò/milómò
272	movement	kàziilò	lùgèèndò	lùgèèndò	kàjiilò
979	mud, mire	màlólò	màlólò	èntómè	ntòpè/màtòpè
642	mushroom	βwòòβà	βwòòβà	βwòòβà	bòòbà
152	mutilated (be)	kùlèmàálà	kùlèmàálà	kùlémàálà	kùlémálá
281	name	ìziìná	ìziìná	ìzíìnà	ìsíìná

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
539	namely	òtí	òtí	βfímwà	òkútééndá
403	nape (of neck)	βùkósì	-	èèŋkòmò	ikòsì/màkòsì
256	navel	ikòòndó	ŋkùùndwí	mùkùùndì	mùnyónyó/mìnyónyó
765	near	hìihí	hìihí	hííhì	hèèhí
379	neck	ŋkìiŋgó	ŋkíiŋgó	bíchà	ikòsì/màkòsì
843	need, request	shìídà ?	-	βwèènzi	-
962	new	nyhàáhyà	nyhyááhyà, ìhyááhyà	ènyhyàhyà	nyhyá
718	night	bwìilé	wìilé	chìlò	bùfúkú
755	nine	syèéndà	syèéndà	mwèéndà	kèéndá
484	nose	nìíndó	nìíndó	ènyííndò	ìnyííndó
211	number	mùlòòŋgò	-	-	-
237	oar	-	-	èèŋgàhì	ŋkàhí
939	obstruct	kùkèmá	kùkèmá	-	kùpííŋgá, kùpííŋgámá
48	offspring	mwàáná/bàáná	mwàáná/βàáná	lùzáálò	bùfyáási, mwàáná
66	oil (from plants)	màsànà	-	màzútà	bùtó, màfùtá
435	oil	màfùtá	màfùtá	màzútà	màfùtá
818	old times, the past	nà kálè	kálé	hàlè	kálè
411	old person	mùnàmpàlà, múkèèkùlù	mùnàámpálá, mùkìikùlù	mùnyàámpàlà, mùkèèkùlù	mùkèèkúlú/bàkèèkúlú
410	old	ndàálà	ìlàálá	-áá kálè	lyà kálè
214	one-eyed (being)	nsòóŋgó	nsòóŋgó	ènsóóŋgò	chóóŋgò
440	one	ìmwí	ìimwí	ímwè, kàmwè	ímwì
590	open mouth wide	kwààsámà	kwààsámà	kwàsàmà	kùgàsámá
984	open	kwìigùlà	kwìigùlà	kùchìiŋgùlà	kwìiɣùlà
829	open (set ajar) a door	kwìigùlà	-	kùchìiŋgùlà, kùhègà	kwìiɣùlà, lyàáŋgò βwìɣùlé
876	order, direct	kùtùmá	kùtùmá	kùtùmà, kùlàgìilà	kùlàgisyà
961	ostrich	mbùùnì, bìnyònyi byáá hèèlà	nòòmvwí	ènyóónzò	-

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
640	our(s) pl. 1st person)	yìító	yìítú	yéétù	fyéétù
506	out (go), go away	kùzyà, kùpùúnà	kùfùmá, kùpùúnà	kùlùgáhò	kùjà, kùfùmá, kùbúúkà
324	outside	hèèlú	hèèlú	héélù	kùùnsé
217	overcome; win, vanquish	kùkìíndà	kùkìíndá	kùsííŋgà	kùyólá
995	owed by, be	kùdàáíwà ?	kùtòòŋgwá, kùdàáíwà ?	-	kùbá nè déénì
835	oyster	-	--	-	-
207	pack (luggage)	kùviiŋgà hámwì	kùvìgà hámwì	kùhìíŋgikà	kàbáámbá
208	pack, press together	kùbiliíŋgà	kùsìndìlílà	kùsííndàgìlà	kùtútíká
456	pack, flock, group	ìdàálé	ìdàálé	bìtùútà, ìdàálè, bìlùùndò	mùléyà
457	pack, bale, bundle (n)	mùligó, kàámùligó	mùligó	-	mùtúúmbá
236	paddle (n) *	-	-	èèŋgáhì	ŋkáhí
342	palate	mùkàáŋká	-	-	mùlòmò mùkàtí, hèègùlù
9	palm (date)	ntééndè ?	-	-	mùtèèndè ?
719	palm-wine	βòsèlè	-	-	màálwá
257	palm (of hand)	sìgàánzyà	sìgàánzà	chìgàánzá	kùβòkó
6	palm (raphia)	-	-	-	-
7	palm (borassus)	mùhàmà	-	mùhàmà/mìhàmà	mùhàmà/mìhàmà
8	palm (oil)	-	-	-	màβèsè
459	palpitate, flutter, tremble	kùvùgùmà	kùzùgùmà	kùzùgùmà	mwégó kùpàlàlà
47	parent, s/he who begets	mùβùsí	mùβùsí/βàβùsí	mùzèèlè	mùfyáásì
720	parrot	kàsúkù	kàsùúkù	-	-
232	pass, surpass	kùhìtá	kùhìtá	kùhìíŋgùlà	kùhìtá
325	path	nzìlà	nzìlà	mùhàándà	nsìlà
159	pay	kùlìhà	kùlìhà	kùlìhà	kùlìhà

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
600	pay attention, take care	kwàmvùlikízyà	kùlèlà, kùtùùŋgá	kwìitòòndà	kùɣáŋgálílà
820	peel, shell	kùpàlá, kùsòòndòólà	kùsèénà, kùsòòndòólà	kùtóóndòlà	kùkòòŋgà
12	peg	lùmààmbò/màámbò	-	èèmbàgò	-
11	pegs (tent)	lùmààmbò/màámbò	lùmàámbò/màámbò	lùmàámbò	ìmáámbó/máámbó
494	penetrate	kùhitilízyà	kwìiŋgílà	kùsyèèpà	kwìiŋgílâ, kùtúßúŋkányà
721	penis	mbòló	lòßòló/mbòló	mbòlò	ißóló/màßóló
884	penknife, lancet	kàkùùmbí	mwàámbí	kàsyò, kàhyò	kàámbî/twàámbî
558	person	mùùntù	mùùntù	mùùntù	mùùntù
638	pestle	mwìisi	mwìisi	mwìinsi	mùùnsì/mìinsi
312	pig	ŋgùlùßè	mpúnù	èèmpùnù	ŋgúlùßè
414	pigeon, kind of	ŋkùúndyà	-	èèŋkùúndyà	ŋkùúndà
579	pile up, pile loads on head	kùtwìikà, kùtikà	kwìitwííkà	kùhííŋgìkà	kùtwííkà
479	pinch, make narrow	kùsìnà	kùsìnà	kùsúnà	kùsìnà
357	pipe (tobacco)	kànùúŋgù	-	isékè	ikùùŋkà/mìkùùŋkà, mùtèèmbà
552	pit, hole	lìinà	lìinà	lìinà	lìiná/mèèná
974	place, put (vt)	kùtùúlà	kùtùúlà	kù táhò	kùbííkà
722	place (n)	hàántù	hàántù	hàántù	hàántù
892	place of the dead	kùzímù	-	kùzímù ?	kùsímú
225	plait	kùsùkà	kùsùkà	kùsùkà	kùsùkà
932	plant, sow	kùhàámbà	kùhàámbà	kùhàámbà	kùbyáálà mbùtó
510	platform	lòtèèßéézyò	lwàánzá	lùßàlázà	hèègùlù
834	please, satisfy (vt)	kùtòósyà	kùtóósyà	kùhichà	kùlyòòhyà
93	pleased (be)	kùsìimà	kùsìimà	kùnùlílwà	kùnyòmwá
13	plot of ground	lòßòógà	lòßògá	lùßúgà, lùßáánzà	-
647	plunder (a town)	kùbàdà ?	-	-	kùtèká ?

No	English	Si-Sùùmbwà SiSìlòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgó	KiBèndè/KiTòòŋgwè
1014	plunge into, cause to sink	kùdùùmbùkízyà	kùdùùmbùkízyà	kùtòßèlà	-
114	poke	kùkùùŋgàánìà	kùkùùŋgàánìà	kwèèndègèzà	kùsòòŋkà
737	pole, thin	iβàzì/màβàzì	iβàzì/màβàzì	lùβázì	-
111	polish, clean by rubbing	kùsìigà	kùsìigà	kùhálàgùtà	-
177	pool, pond	ilàámbó	ilàámbó	ilàámbò	kàsiβà
923	porcupine	liŋògótè	inògótè	ènyògótè	nùùŋgúli
374	porridge (stiff)	βùgàli	βùgàli	òβúlò	βúɣàlì
42	pot (metal)	ikòpó	ikópò	ikópò	ifùlílà/màfùlílà ?
41	pot, vessel	sìsèmè/vìsèmè	sìsèmè/vìsèmè	chìsèmè/vìsèmè	ŋkònó
39	pot, mug	mùkébè	mùkébé	mùkébè	-
40	pot, cooking (earthen)	nùúŋgù	nùùŋgù	ènyùùŋgù	ŋkònó
749	potato (sweet)	màziízì	ìziízì/màziízì	ènùùmbù, lùnùùmbù	sìlòòmbò
646	potter's kiln	-	--	-	-
369	pound (grain in a mortar to get off the husks)	kùsèèkúlà	kùkùùzùùlà	kùsèkùlà	kùtwá
441	pour away	kùsèèsà	kùsèèsà	kùsèèsà	kùɣóná
641	pour	kùfùkà	kùkènénà	kùlòòŋgèlà	kùɣóná βúsèèβúsé
748	pregnancy	ndà	ndà	èèndà	indà/ndà
636	pregnant, be	kùtwààlá ndà	kùtùùŋgá ndà	kùβà nééndà, kùtéélwá èèndà	kùβá né ndà, kùnywààmà
599	prepare	kùtàyàálísyà ?	-	kùliìŋgàniza	kùlyòòhèlèsyà
553	press out (oil seed, sugar cane)	-	kùhámúúlà	kùkáánzà	kùkámá
986	produce, put forth, display	kùpùùnìà	kùfùmyá	kwiihához	kùfùmyá

No	English	Si-Sùùmbwà SìSìlòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
909	prominent (be); put out	kùpùúná	-	kùtùlùkà	kùmànyìkà
518	pronounce	kùtètà	kùtètá, kùyòòmbà	-	kùtèéndá
340	protect by charm (medicine)	kùgùúŋgùúlà	kùkágá	kùkágà	kùlíísíímpà, kùsìímpà
947	protect by charms (target)	kùgùúŋgùúlà	kùkágá	kùkágà	kùlíísíímpà, kùsìímpà
475	puff-adder	kìpíli	iβàámbàhìli	íβàámbàhìli	impíli/mpíli
244	pull	kùkwèèsà	kùkwèèsà	kùkwèèsà	kùbwìitá
173	pull up, come to a halt	kwìímílìlà	kwìímìlílà	kwèémèlèlà	kwìímílílà
172	pull up, root up	kòsìímbòòlà	kùdùbùlà, kùsìímbùùlà ?	kùnyùkùlà	kùmòólà
833	pull, drag	kùbwèègà	kùkwèèsà	kùkwèèsà	kùbwìitá
57	pump	ìbòómbà	iβòómbà	iβòómbà	-
548	push	kùsùkúmà ?	kùsìíndíkà ?	kùsìíndìkà	kùtèèŋkà
992	put, place, set	kùtùúlà	kùtùúlâ, kòβìíkà	kùβìíkà	kùbííkà
887	put together for comparison	kùlìíŋgànìsyà	kùlìíŋgànìsyà	kwìíŋgànìsà	kùlìíŋgàànyà
969	put a pot on the fire	kwààlíkìlà	kùtèlékà	kùtèlèkà	kùtèléká ŋkònò
981	put together, compose	kùlìíŋgá	-	kùlìíŋgà	kùtùúŋgá
862	python	nsàtó	nsàtó	èènsàtò	nsàtó
656	quarrel (vi)	kùsòólà	kùsòólà	kwìízùmàgùlà	kùsòòlà
180	quench, extinguish	kùzìmá	kùzìmyá	kùzìmyà	kùsìpyá, kùhwá
485	quiet (be)	kùlèèmbèèlà	kùlèèmbèèlà	kùtékàànà	kùhúúmbúlà
76	rain	mvùlá	mvùlá	èènzùlà	(ì)mfúlá
917	rain (vi)	kùtòlá (mvùlà)	kùgwà (mvùlá)	kùgwà nzùlà	kùgw' èmfúlá, kùtóónyà
1006	rains, the lesser	kàswààlázì	-	-	mùtùsyò ?
197	rainy season	syàándà	ìtùúmbá	ìtúúmbà	kùsòɣó

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
580	rumble	kùtùtùmà	kwàànà, kùhìĭndà	kùzíímbà	kùjòβòòlà
26	rat, kind of	ŋkèsí	ŋkèzì	éèŋkèzì	nsèènsí
488	rat (field)	ŋkòsò mùdóló	-	èèmbèβà	ìkòsò/màkòsò
24	rat	ŋkòsò	ŋkòsò	mùdòlò	ìkòsò/màkòsò
25	rat- (very large, long-tailed)	ŋkèsì	-	mùdòlò	tùùŋkò
883	razor	lùgèèmbè	lùgèèmbè	wèèmbè	kàɣèèmbè
949	read	kùsómà	kùsòmà	kùsòmà	kùsòmà ?
1007	reap, harvest	kwìímbùlà, kùsólà	kwĭímbùlà, kùkèsà	kùsùùndùlà, kùgèsà, kùtònà	kùsùùɣùlà
523	receive	kùpòkèèlà	kwàànùkùlà	kwàànùkùlà	kùpòkèèlà
537	reed	lùbìlŋgòbìlŋgò	ìtètέ/màtètέ	ìdètè/màdètè	ìtètέ/màtètέ, ìswé
632	refuse, say no	kùkèmá	kùkèmá	kwááŋgà	kùtúná
633	reject, refuse, dislike	kùkèmá, kùkàánà	kùkèmá	kwàáŋgà	kùtùná
545	remain, stay behind *	kwìlkàlà nùmà	kwìikàlà	kwìlkàlà	kùsííβà
1035	remain, stay	kùsàágà	kùsìlgálà	kwìlkàlà	kùsííβà
840	remember	kwìlzòkĭlà	kwìlβòkĭlà	kwìβùùkĭlà	kwìsùkìlà
499	resemble *	kwìlkòlá	kwìlkòlá	kùsùùsànà	kùlìŋgàànà
879	resemble (very closely)	kwìlkòlá	kwìlkòlá	kùsùsà	kùlìŋgàànà
1031	resemble *	kwìlkòlá	kwìlkòlá	kùsùsà	kùlìŋgàànà
149	rest heavily on, be burdensome	kùβùná	kùlèmèèlà	kùtìimbilwà	kùβáándá, kùβáándikíísyà
964	rest the cheek on the hand (in brooding mood)	kwìlkwàátá kàtàmá	kùkwàátá ìtàmá	kùhòlòlòkèlwà	kùnyígá ìtàmà [kùnyíg' ètàmà]
957	rest, take a holiday	kwìlfùúlà	kwìlfùúlà	kùhúmùlà	kùtàmùkà
249	return, go back	kùsùβá	kùsùβá	kùsùβà	kùhèlèélà
1004	return	kùsùβá	kùsùβá	kùsùβà	kùhèlèélà

No	English	Si-Sùùmbwà SìSìlòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
500	revive	kùzòòkòlà	kùhèèmbúúsyà	kùhìímbùùlà	kùhéémbúúkà
318	rhinoceros	mpèlá	-	èèŋkùlà	mpélá/mpélá
988	rib	lùβàvù	lùβàvù/mbàvù	lùβàzù/èèmbàzù	lùβàfù/mbàfù
473	ripe	yá βùhyé	ìhíílè	-íhìílè	-híílé
996	ripen (vi) *	kùhyá	kùhyá	kùhyà	kùhyá
472	ripen (vi)	kùhyá	kòhyá	kùhyà	kùhyá
209	river	mwìigà	mwìigà	mùnónà	móóŋgá/myóóŋgá
239	roar, rumble	kùhùùmà	kùhùùmà	kùlùùŋkùmà	kùlílà
644	roast	kùkàànzyá	kùkàlá	kùkálàáŋgà	kùtùùmbà
350	roast (in/by fire)	kwòòsyà	kwòòsyà	kwòòchà	kùyáániká
806	rock	mwàámbá gwì βáálè	-	ìtàálè	ibwè/màbwè
291	rooster (cock)	ŋkùùŋgùlúmé	ŋkùùŋgùlúmé	èèŋkùùŋgùlùmì	(lì)kàjèènjè/(mà)kàjèènjè
169	root	mùzì	mùzì	mùzì	mùsísí/mìsísí
29	rotten	kùβòlà	ìβí, ìβòlé	-βì	ìbòlé, ìbòsílé
1012	round (be)	mbìlìiŋgè	kùvìiŋgìlísyà	kùzííŋgìlílà	kùbúlúŋgúkà
183	round (go), turn round	kùpìlímá	kùpìlímà	kùzìiŋgà	kùsyúŋgúlúkà
999	round, become	kùvìlìiŋgísyà	kwìivìliíŋgísyà	kùzìiŋgà	kùbá ìbùlúúŋgú
110	rub	kùkùùsà	kùkùùsà	kùkùùsà	-
50a	rubbish, garbage	màtàkàlà	màtàkàlà	βìtàkálà, mwàgà	bùcháfù ?
321	rubbish heap	ìzyàálálà	ìzyàálá	ìtàáβà/màtàáβà	ísyàálà
826	run	kwìilókà	kwìilúkà	kwìilúkà	kùkìlímà, kwìilúká
522	sacrifice	mùlàbùlùlò, sìtàámbò	-	-	mpèló < kùpéélà
723	salt	mwìinú	mwìinú	mwòónyò	mùkèlé
95	sand	mùsèèŋgà	mùsèèŋgà	mùsèèŋgà	mùsíínsí/mìsíínsí
630	satiated (be); have enough to eat or drink	kwìikútà, kùhàgá	kwìikútà	kùhàágà	kwìikútá

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
788	satisfy	kùtòósyà	kùtòósyà	kùhìchà	kwiikúsyá ?
251	say to, tell to	kùbwɨ́ílà	kùwɨ́ílà	kùgàámbìlà	kùbálílà
783	scorpion	ŋgè	kàmìínà	kàmìínà	kàámínà/tùúmínà
453	scrape	kùkwàálòlà	kùpálá	kùpálá	-
855	scrape, grate	kùkwàálòlà	kùkwàálùlà	kùkwàálùlà	kùpàlà
856	scratch, grate *	kwìlyàágólà	kùsìnàágùlà	kùkwàálùlà	kùpàlà
668	scythe, sickle	lwiihyò	mùhòólò	mùhólò	mpùpó <kùpùpá
84	search for	kùkóóβà	kùkóóβà	kùlòóndà	kùhéénsá
85	search diligently	kùkùlà	kùkùlà	kùkùlà	kùhéénsá
738	seat, stool, chair	ìtèβé	ìtèβé	ìtéβè	sìtèβé/fìtèβé
770	see	kùβònà	kùβònà	kùlèèβà	kùlòlà
67	seed	mbùtó, mbègù	mbùtó, βòtùúŋgà	mbìβò	mbútó
404	seize	kùkwàátà	kùkwàátà	kùkwàátà	kùnyìyà
611	self	-ènèkílí	-ènɨ̀kɨ̀lɨ̀	yòónyènè	mwèènè (-èènè)
302	sell	kùgùzyà	kùgùzyà	kùgùzà	kùɣùlà, kùgùsyà
570	send	kùtùmá	kùtùmá	kùtùmá, kùlàgìzà	kùtùmá
451	separate, set apart	kùlèkàánìà	kùlèkàánìsyà	kùlèkàánìsà	kùbííká hàájéháájé
450	separate, leave each other	kùtàáŋgánà, kùlèkàánà	kùtàágánà, kùlèkàánà, kwìilékà	kùlèkàánà	kùlèkánà
534	set a trap	kùtègá	kùtègá	kùtègà	kùtèɣá
868	set (of the sun)	kùlòká	kùlòká	kùlòkà	kùsyáámà
971	settled (be); be in good order	kùlèèmbèèlà	kùlèèmbèèlà	kùséméìà	kùlyòòhà
754	seven	mùsàámvù	mùsàámvù	mùsàánzù	mpùúŋgátì, ndwì
1033	sew *	kùsònà	kùsùmà	kùsònà, kùsùmà	kùlàándà
589	sew	kùsònà	kùsùmà	kùsònà, kùsùmà	kùlàándà
135	sexual intercourse with (have)	kùswííkà	kùgèmà	kùchùgánà	kùtóómbà, kùswàánà

No	English	Si-Sùùmbwà SìSìlòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
691	shadow, shade	mùtákà	mùtákà	mwìinzíizi, mùβéhò	bùlèlò, sìinsímwì
867	shame, disgrace	nsòní	nsòní	èènsòni	nsònyi
116	shame	nsòní	nsòní	èènsòni	nsònyi
724	shame, modesty	nsòní	nsòní	èènsòni	nsònyi
386	sharp (be)	kùùgíhà	kùùgíhá	kùkálà	kùkálihá
920	sharpen	kùnòòlà	kùnòòlà	kùhyòòlà	kùtyásyà
915	shave	kùsùnzòólà	kùsùnzúúlà, kùmòògà	kùsòsòlà	kùbéyá
603	she, he	àwénè	àwé	wènyénè	ùyò, yóyòlí
287	sheep	ntàámà	ntàámà	èntàámà	ŋkòndólò ?
1009	shell, cowrie	nsìimbí	nòòŋgá	ènsìimbi	mpási, màámbà
822	shell	-	nòòŋgá	ènsíiŋgò	ŋkòmbélélé
725	shield	ŋgàβò ?	-	-	-
712	shin (bone)	mùlùùndí	mùlùùndì	mùlúúndì	mùlúndí
968	shiver, shudder *	kùzùgùmà	kùzùgùmà	kùzùgùmà	kùtètèmà
528	shìver	kùzùgùmà	kùzùgùmà	kùzùgùmà	kùtètèmà
434	short	nìihí	nìihí	-gùfù	ntófú
430	shoulder, tip of	iβègà	-	-	-
588	shoulder	iβègà	iβègà	iβègà/màβègà	ibèyà/màbèyà
839	shout	kùyògá	kùyògá	kùtélà yòòmbò	kùtááŋgíílà, kwìilá bùlàáŋgà
946	shrivelled (be); wrinkled	-	-	kwìisùnà	-
763	sick	kùlwàálà	ilwèélè	βùlwéélè	lwèélé
870	sift	kùyòòŋgà	kòyòòŋgà	kùyùùŋgà	kùsàágùlà
615	sing	kwìimbá	kwìimbá	kùzìnà	kwìimbá
3	singe	kùbàbúlà	kùβàbólà	kwòòchèèlà	kùbábúlà, kùgòsyà
980	sink, be drowned	kùnùbísà	kùtùβìlà	kùtòtà	kùsyàámà, kùnyàánya
170	sink	kùnwìbílà	kùtùβìlà	kùtùβìlà	kùsyàámà

No	English	Si-Sùùmbwà SiSìlòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
726	sister (his)/ (her) brother	kàlúúmbù	ìlùùmbú	mùnyáányà	ìlùùmbù
627	sit	kwìikàlísyà	kwìikàlisyà	kwìikàlìsà	kwìikàlà
753	six	mùkàágá	mùkàágá	mùkáágà	mùkááyá
785	size, measure	ßùkùlú, ßùdàázì	-	*lwìimò, chèèmò*	*sipíimò* ?
123	skin (of person)	ndìlí	ndìlí	ìkòßà	ikóbá/màkóbá
124	skin/rind (of fruit)	ìgúlà	ìsùswà	ìsúswà/màsúswà	ìpàpá
303	sky	ìlùùndè	ìlùùndè	ìgùlù	íyùlù
865	slander, accuse falsely, often secretly	kùchòòŋgèlèlà	-	kùßééhèlà	kùsòòŋgèlèlà
470	slap	kùhúúlà ìkòófì	kùhòòlá ìkóófì	kùtéélá ìkóófì	kùhúúl' é kòòfì (kùhúúlà)
970	slash	kùtémá	kùtémá	kùtémà	kùpùpá
220	slaughter	kùsìká	kùsìinzà, kùßàágà	kùßáágà	kùsíínsá
727	slave, bond servant	mùzyàànà	múzyàànà	mùzáànà	m(ù)syà
728	slave (female)	mùzyàànàkàzì	múzyàànà	mùzáànà	m(ù)syà
729	slave, (male)	mùzyàànà	múzyàànà	mùzáànà	m(ù)syà
136	sleep (vi)	kùgònà	kùtìindílà	kùlyámà	kùyònà, kùláálà tùló
731	sleep (n)	*tùló*	*tòló*	*tùlò*	*tùló*
730	sleeping-place, accommodation	ßùlàálò, hà sìgònò	ßùlàálò	ßùláálò	bùlílì, hà kúlàálà
967	slip, be slippery	kùnènèlà	kùnèlèlà	kùtèlèlà	kùtèlèsyà ?
1021	small	ndõ	ndó	iké	-nsé, -sé
332	smallpox	ndùbí	ndùßí	-	ndùßì ?
241	smell (sweet) (vi)	kùmòòtà	kùnùùŋkílà	kùmòòtà, kùmòòtèèlà	kùnyùŋkìlílà
242	smell (bad, of fish) (n)	kùhùgùtà	mùnùùŋkò	kùnùùŋkà	kùnyùùŋkà
240	smell (bad) (vi)	kùnùùŋkà	kùnùùŋkà	kùnùùŋkà	kùnyùùŋkà
629	smoke (n)	lyòònsí	lyòònsí	mùhìlíŋkà	lyóónsí

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
428	smoke (give out) (vi)	kòfùùβìílà	kùzùùkà	kùtùùŋkà	kùfúmyá lyòònsì
387	snail, slug	mùfwèèlò	mfwèèlò	ènyóóŋgà	-
837	snail	mùfwèèlò	mfwèèlò	ènyóóŋgà	-
145	snake, serpent	nzóká	nzòká	èènzóká	nsóká
158	snare, trap (n)	mùtègò	mùtégó	mùtégò	-
864	sneeze	kwiityàámúlà	kwiityáámúlà	kùtyáámùzà	kùtísílá
924	sniff, smell out	kùnùùnsyà	kùnùùnsyà	kùnùúnychà	kùnùúnsyà
296	snore, snort	kùgònà, ìhìlìisì (n)	kùkòlòmà, kùhòlòòtà	igónò (n)	kùkólòmà
69	soil	βùlòòŋkó	βùlòóŋkò	itàká	bùlóóŋgò
732	song	nìímbó	lwìímbó	lùzínà/èènzínà	lwíímbó
616	songs *	nìímbó	mìímbó	èènzínà	nyíímbó
36	soot	múvíílà	mivwiílà	ivíílà/mávíílà	màsìsí
195	sorcerer	mùlòzì	mùlózì	mùlógì	mùlòsì
201	sore	ilòòndà	ilòòndà	ilòòndà	silòòndà/filòòndà
734	soul, spirit	mwìízò, mùtìmá	mwìízò	mùgánya	mwèèyò
331	sound, cry	kùlílà	mùzwì	ilákà	-
64	space (open)	bwèèlú, lùbúúgà	lùwúúgà	βwèélà	mbùyá
82	spark	nsàsé/màsàsé	nsàásé/mìsàásé	èènsàsè	nsésé
253	speak	kùyòòmbà	kùyòòmbà, kùtètá	kùgàámbà	kùtèéndá
733	spear (n)	ìsùmú	ìsùmú	ìchúmù	ìsùmó
137	spend time	kwiifùúlà	-	kùlòmèèlà	kwiisyá
1038	sperm, semen	βùtàáŋgá	βònyàáli	βùnyááli	-
62	spider	lùbúbì	lòβòòβì	lùβùβì	-
182	spirit (of dead person)	mùsàámbwà	mùzímù ?	mùzímù	iswá, ìsèyá
464	spirit (disembodied)	misàámbwà	-	mùzímù	iswá
683	spirit (evil)	-	-	mùtùúŋgé	iswá
582	spit	kùtùúgà	kùtùúgà	kùchwèèlà màchwàántè	kùtèmá

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
533	spittle	màswàànté	màswàànté	màchwàántè	màté
601	split, crack (vt)	kùßàlálòlà	kùtàándùtà	kùhálàgùtà	kùpùtà, kùpùtúlá
951	spoil, blind (vt)	kùhòfùzyà	kùhòfùsyà	kùhòfùlà	kùpòfùsyà ?
649	spoil (a child)	kùdèkèzyà	kùlèmàázyà	-	-
998	spoil	kùbiífià	kùßiífhyà	kùßiífhyà	kùyónónà
813	spoon	mwiiŋkó	mwiiŋkó	mwiiŋkò	mwiikò
5	spot, speckle	iβàlá	iβàlá/màβàlá	iβàlà/màβàlà	iβàlá/màβàlá
959a	sprain an ankle	kùtèèŋgúkà	kùmyóólà	kùláβùlà	kùtèyúká
141	spread out (be)	kùsaàmbáázyà	kùsààmbàázyà	kùsàámbàálà, kwàálà	kùsàámbáálà
527	spread	kwàánzà	kwàánzà	kwàálà	kùgànikà, kùyàánsà
908	spread abroad, be; become generally known	kùmàniiŋkánà	kùmàníiŋkà	kùkúmùùŋkà	kùmànyikà
592	spread, smear on	kùsiigà	kùsiigà	kùsiigà	kùpàká ?
591	spread, scatter (vi)	kùsáámbáálà	kùsàámbàálà	kùsàámbàálà	kùsáámbáálà
880	spring (of water)	lùviilò	-	èènsókò	sisimá ?
965	spring, machine	màsiínè ?	-	màsínè	-
866	spy out	kùpèlélézyà ?	kùpèlélézyà ?	kùßúliilizà	kùgùùnsà
849	squat (on the haunches)	kùsùkúmálà	kùsùkùmàlà	kúsúkùmàlà	kùsúúnsúmálà
991	squeeze oneself up against a wall (e.g. to allow another to pass)	kwiihisyá	kùhìsyá	kwiihègà	kùhìsyá
914	squeeze out	kùvìgà	kùkàmóólà, kùvìgà	kùvìgà	kùkàmá
343	squeeze, milk	kùsyèémà	kùkàmóólà, kùsyèémà	kùkàmá	kùkàmá
102	squirrel	-	-	-	-
562	stack, pile up	kùlúúndikà	kùsòòzyà	kùsòòzà	kùtùtìkà, kùpàáŋgà
1029	stand (vi)	kwiimilílà	kwiímiílílà	kwèèmèlèlà	kwiimilílà

No	English	Si-Sùùmbwà SìSìlòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
735	star	nsòòndá	nsòòndá	èɲsóóndè	ìùtááŋgwà/ntááŋgwà
390	stare, glare	kùvyòòlà mìinsó	kùvyòòlà mìinsó	kùkóómpòlà	kùtùùmbùlà mèènsò
202	start off, send away	kwìihàló, kwìihákó	kùfùmyá	kwìháhò	kùfùmyá
799	startle, catch unawares	kùsítùlà	kùsàáŋgìlìzyà	kùfùùmbùlà	kùgùndùmùlà
830	startle, jerk	kùsítùlà ?	kòsìtòlà ?	kùtìinisà	kùsísúká
618	steal	kwìiβá	kwìiβá	kwìiβà	kwìiβà
266	steel	syùùmá	syòòmá	chòómà	ijèlà
554	stem (of maize, millet, etc.)	-	-	ìipólìpò, iβèlélè/màβèlélè	ìhèlèlè/màhèlèlè
825	step over	kùtàámbòòlà	kùtàámbùkà, kùgùlùkà	kùgúlùkà	kùtàáβúlà
315	sterile man (or woman)	mùgòòmbà	mùgùùmbà	mùgùùmbà	mùyùùmbà
541	stick	ŋkòní	ŋkòní	èèŋkòní	ìntùβà
74	stir, mix by stirring	kùtòβà	kùsàgànìà	kùpàmìlìzàkù	kùsìkìsà
850	stir	kùtòβà	kùtòβà	kùvwóógà	kùsìkìsà
78	stir up	-	-	-	-
61	stone	ìβàálé	ìβàálé	ìβáálè/màβáálè	iβwè/màbwè
228	store up, collect	kùlúùndìkà	kùsòòzyà	kùsòòzà	kùkóóŋkáányà
154	straight (make)	kùgòlòòlà	kùgòlòòlà	kùgòlòòlà	kùgòlòlà
268	stranger, guest	mùgènì	mùgènì	mùgènyi	mùnyènyi/βànyènyi
661	stream, current	-	-	mùgèlà	móóŋgà
798	strength, power	ngùzù	ngùzù	máání	mànáyá
140	stretch oneself	kwìigòlóólà	kwìigòlóólà	kwìigòlòòlà	kwìiyólólà
395	strike, knock	kùbàámízyà	kùbàámízyà	kùkúúmpà	kùhúúlà
982	strike with a spear	kùtàsá	kùsòmà	kùchúmìtà	kùsòmà nè sùmò
282	string (n)	bùzì	βùzì	βùzì	kàjè/tùjè

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
487	strip off (e.g. grains of corn)	kùkùùzùlà	kùkùùzòlà, kòhòlòlá	kùkùùzùlà	kùkòòŋgà
519	strut proudly	kwiìßònà	kwiìßònà	kùtáámbà ?	kwìtéhá
407	stumble	kwìikùùmpà	kwiìkúúmpá	kùkúúmpà	kùkúúntúká
997	stunted (be); be spoilt	kùsisà	kùdùmàálà	kùkòmá	kùtónà
948	stutter	kùßà ná kàlímí	kùgùgùmìlà ?	kùtítìhàzà	-
594	suck (the breast)	kwòòŋkà	kwòòŋká	kwòòŋkà	kùɣóóŋká
480	suck (vt)	-	-kùmìímà	kùnyúúnyà	kùmímá
912	suffer, bear patiently	kwiigùmílizyà	-	kùtìíndá ùmùgányà	-
802	sugar cane	igúßá	ìgùßá	ìgùßà	ìgúßà/màɣúßà
333	sun, light	izyòòßá	ìzyòòbá	ìzóóßà	isyóóßá/màsyóóßá
184	surround	kùpilímà	kùpilímà	kùzóŋgòlòkà	kùsyúúŋgúlúká
438	swallow	kùmìlà	kùmìlà	kùmìlà	kùmìlà
777	swear	kùtàhìlà	kùtàhìlà	kùtàhìlà	kùtàhìlà
905	sweat	mpìtá	lòòyílò	èmpìítà	kàfítà
392	sweep up, collect in a heap (rubbish)	kùmìíŋgà, kùzyòòlà	-	kùzòòlà	kùhyááhílà, kùkóóŋkáányà
943	sweep	kùhyàágílà	kùhyàágílà	kùhyáágìlà	kùhyááhílà
517	sweet, pleasant	nsèèmé	isèèmé	ßùnúzí	-lyóóhílé
51	swell	kùviìmbá	kùvìímbá	kùzíímbà	kùfíímbá
608	sword (short)	lùpàáŋgà	-	-	lyàámbè
933	sword	ùpàáŋgà	ùpàáŋgà	ìùpàáŋgà	ìùpàáŋgà
360	tail	mùsìlá	mùsílá	mùchílà	mùsílá/misílá
875	take leave of	kùtàáhyà	kùtàáhyà	kùtàáhyà	kùtàáhyà
778	take in (from rain, etc.)	kùhisyá	kwiìgémá	kwiìgèmà èènzúlà	kùkìlímà mfùlà
565	take, carry	kùßòósyà	kùsòlà	kùtwàálà	kùtwáálà

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
233	take off (clothes), undress	kwàámbòlà	kwàámbòlà	kùzùùlà myèèndà	kùfúúlà
530	tangle	-	-	kùβúlàgìzà	kùjòbàányà
898	taste (v)	kòlàβòzyà	kòlàβòzyà, kùβòónzyà	kùβòónzà	kùbòónjà ?, kùliiŋgìsyà
985	teach, instruct	kùlàánzyà	kùlàáŋgà	kwèégèsà	kùfúúndísyà ?, kùlàánsyà, kùlàáŋgìsyà
621	tears	miisózi	miinsózi	màlilà	ndililò
412	ten	ikùmí	ikòmi	ikúmì	ikúmì
121	termite	itèmí	itìní	itémì	mùswá/miswá
739	testicle	ivyà	ivyà/màvyà	igòsì/màgòsì	itùlù/màtùlù
1020	that	èbyò, èyò	ìyò	èlyò	-lyélèlí
455	thatched roof	kànò	-	mpàlàtò	-
767	there	àhà, èyènó	àhàlyá, ìyìlyá	àhò, òkù	kókòlì, ùùkò
54	they	àβé	àβé	βònyénè	βèènè
444	thick, fat	mùgìné	-ìgìné	lígìnìlè	ìhàmú
86	thicket *	ìsàlà/màsàlà	ìsàlá/màsàlá	isàkà/màsàkà	ìhúúmpú/màhúúmpú
854	thicket	ìsàlà, ìpòòlù	isàlà, sìsákà	isàkà/màsàkà	ìhúúmpú/màhúúmpú, ìsìgò
619	thief	mwììví	mwììví	mwííβì	mwìífí/bèèfí
23	thigh (of human)	sìβèlò	-	iβèlò/màβèlò	ìtàámbá/màtàámbá
22	thigh (of animal)	sìtàámbò	sìtàámbò	chìlùùmbù/βìlùùmbù	ìtàámbá/màtàámbá
559	thing	siìntù	siìntù	chìintù	siìntù/fiintù
987	think, imagine	kwìigàníkà	kwìigàníkà	kùtèékùzà	kùlàáŋgàányà
651	thirst	nòótà, ŋkèlò	nòótà	ìlihò	ŋkááŋgú
740	thorn	liigwà	liigwà	ìihwá/máhwà	liimfwá/méémfwá
689	threaten	kùtiisyà	kùtiisyà, kwòòβáhyà	kùtíinisà	kùyóβáhyá, kùkáyá
532	three	ìsátú	ìsátú	ìsàtù	ìtátú
115	thrust into	kùsòmà	kùsòmà	kùchùmità	kùsòmà
420	tick (cattle or dog)	ŋkùhà	ŋkùhá	èèmbàlàβálà	-

No	English	Si-Sùùmbwà SiSìlòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
1034	tie (fasten) (vt)	kùβòhá	kùβòhá, kùdàligà	kùβóhà	kùháámbá, kùháámbílílà
258	tie up	kùβòhá	kùβòhá	kùβóhà	kùháámbá nè ŋkùsà
978	tingle with excitement	kwìyòólà	-	kwìimùkà	kùjílìmùkà
119	tip, point	hà wòògí	βùsòòŋgóké	mùhélò	kànsóóŋgélélè
741	tobacco	ìtàáβè	ìtàáβè	ìtàáβè	nsùùŋkò
146	today	βùlèèló	βùlèèló	lèélò	bwàálélò
742	toe	mùnwè	ìnòònò	lùkúmù	kàkùmó
445	tomato	nyàányà	nyàányà	ènyàányà	ìnyáányà ?
105	tomcat (half-wild)	sìimbùúlù	sìmbòólò	mùgòòmbà	-
743	tomorrow	ìgòlò	ìgòlò	ɲèéɲcà	ìsònéká
166	tongue	lùlìmí	lòlìmì	lùlímì/èèndìmì	lùlímí/ndímí
120	tooth (canine), tooth filed to a point	lìínó	-	-	líínó/méénó
267	tooth	lìínó/mìínó	lìínó/mìínó	líínò/méénò	líínó/méénó
306	top, peak	-	-	kàsù	kànsóóŋgélélè
293	tortoise	fúlwè	fùùlwè	sògògótè/ màsògògótè	-
277	town	mùjìíní ?	-	ìhàlà	lùgó/ŋgó
378	tramp of feet	sìsìíndó	mùsìíndó	chìsìíndò/nsííndò	-
270	travel	kùzyà lùgèèndò	kòyòòŋgà	kùyéélà	kùjà lwèèndò
540	tree	múti	mùtí	mùtí	sìtí/fítí
538	tremble, shake (vi)	kùzùgùmà	kùzùgùmà	kùzùgùmà	kùtètèmà
566	trickle away	kùsèlèmà	kùsòlòlóká	kùtóónyà	kùsòòβà
401	trunk (of elephant)	kàβìkó	kàβìkó	kàβíkò	kùβókó kwá nsófú
604	try	kùgèmèzyà	kùgèmèzyà	kùgèmézà	kùlìiŋgìsyà
605	tsetse-fly	nsàálè	-	èèndòlóβò ?	kàjéémbé/tùjéémbé
938	turn upside down, turn over	kùpilòsyà	kùpìlùsyà, kùpìindòòlà	kùpilùlà	kùhìindùlà

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
174	turn round	kùpìlìmyà	kùpìlìmyà	kùpìlùkà	kúsyúŋgúlúsyà
711	tusk, elephant's (middle size) *	-	-	-	ìíínó lyá nsófú
452	twin	ìhàsá/màhàsá	ìhàsá/màhàsá	ìhàsà/màhàsà	ìhásá/màhásá
185	twist roll, spin with fingers	kòsùmá	kùpèlègà	kùpèlègà	kùsòkòtà
483	twist, esp strands	kùpòtà	kùpòtá	kùpòtà	kùsùkà
752	two	ìβìlí	ìβìlí	ìβìli	ìβìli
18	udder	sìnènà	sìβèélè	ènsóónzì	ìβéélè
945	uncover, reveal	kùfùùndùkúlà	kùfùùndòkólà	kùsùlúúlà	kùfúúndúkúlà
551	unripe, half grown	-tììndì	màtòótó	ìβísì	ìβísí
994	unripe, uncooked	-βisi	-βisí	ìβísì	ìβìsí
311	up, above	hììgúlyà	lògólò	lùgùlù	kwììgùlù, hèègùlù
614	upright	βwìímé	βwìímé	βwíímè	bwíímà
446	urinate/defecate	kùnìà, kùsùβàálà	kùnìà, kùsùβàálà	kùnìà, kùnyàálà, kùkóyòlà	kùsùβàálà
745	urine	màànsù	màànsù	èèŋkálì	màsù
569	use	kùtùmílà	kùtòmílà	kùkólèlà	kùtùmilà ?
307	utmost, highest point	hììgúlyà	-	kàsù	hèègùlú
904	vapour, gas	-	mwààyó	-	-
380	vein	mùgìsà	mùgìisà	mùgììsù	mùsìpà ?
276	village	syàálò	syàálò	kìjíjì ?	lùyó
692	virgin (bride), girl	mwàànìké	mwàànìké	mùhàlákàzì	múhàlà/βàhàlà, nína bwìiŋgà
327	vision	kùβònà	kùβònà, múlòótélò	-	kùlóótà
330	voice, (thunder)	múzwí	mùzwí	ìlákà	-
224	vomit	kùlòká	kùlòká	kùtánàkà	kùlúká
524	walk (take a)	kùyèèlà	kùyèélà	kùtúúmbàgilà	kùlyàátà

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
269a	walk	kùzyà, kùtùùmbágílà	kòzyà, kùtùùmbágílà	kùgèèndà	kùjà
847	wall	lòkútà	ŋkàándè	èèndùgú	lùmàtò
983	want, need, wish	kùkòòβà	kwèèndà	kwèèndà	kùhéénsá, kùlùùkílà
507	war	βìtà	-	ichúmù	fìtà ?, màsòòlà
790	wart-hog	ŋgìlì	ŋgílì	èèŋgìlì	ŋgìlì
860	wash oneself (after evacuating)	kùhìhyá	kùsyèènèèntà	kùtyèègánà, kùhèéhà	kùhìhá, kùsyèèlèkà ?
127	wash (hands)	kwìikàláβà	kwìikàláβà	kùnàáβà	kùnyááyà
128	wash (clothes)	kùtùlà, kùkàánzà	kùtòlá	kùfùlà myééndà	kùkúβá myèèndá
129	wash, take a bath	kwòògà	kwòògá	kwòògà	kùnyááyà
322	water	mìinzí	mìinzí	mìinzì	màànsí
959	wave, let off a trap, remove a spell	kùtèèŋgúlà	kùtègòólà	kùtégùùlùlà	kùtégúlá
1017	we	ìfwé	ìfwé	ìchwè	ùùfwè
1010	weak	mùzòβé	mùzòβé	-	mùkìmé
881	wean a child, give leave, send away	kùsùùsyà	kùsòósyà	-	kùlèsyà ibéélè
234	wear, dress	kwàámbàlà	kwàámbàlà	kùzwáálà	kùfwáálà
501	weave, knit	kùsùkà	kùsùkà	kùsònà	kùsùkà, kùβóhá
1015	weight, rhythm	βùtìimbé	βòtìimbé	βùtíímbè	-
210	well	lwìinzí, ìzìβà, sìsímà	ìzìβà	ìzìβà	sìsímá
56	wet (get)	kùtòtà, kùtàlàlà	kùlòβà	kùlòβà	kùnyàányà
919	what?	βìindé	βìindé, èsí	chíhâ	nísí
469	which?	yè tyáání	yè tyáání	lítâ	ni síintù sí
192	whistling	lùgùùnzù	lògòònzò	lùchúlizò	kàgùùnsù kùhúúlà
175	white man	mùzùúŋgú	mùzùúŋgù	mùzùúŋgù	mùsyúúŋgù
610	white	yèpé	lyèépè	kwèèlà	-áápé
918	who?	éndè	éndé	òhâ	gànyí

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
28	wicked	-βí	-βí	múβì	-βí
339	wife	mùkìímá	mùkàzí, mùké	mùkázì	mùkásí
187	wind up (thread)	kùvígà	kùgòòndà	kùgòòndà	kùkúúnjá
746	wind	mùyàgá	mùyàgà	mùyàgà	mùsáyà
937	winnow	kùhèhá, kwèèlùlúlà	kwèèlòlà	kùhéhèèlà	kùpéépéétà
112	wipe	kùsyàágúlà	kùsyàáŋgòlà	kùhyáágùlà	kùfùtà ?
88	wire (brass)	wàáyà ?	wáàyà ?	ènyélèlè	-
194	witchcraft	βùlòzì	βùlòzì, βòsùní	βùlògì	bùlòsì
279a	withhold from	kwìímá	kwìímá	kwíímà	kwìímá
279	withhold from, abstain	kwìíyìímá	kwìíyìímá	kwíyìímà	kùlèkà, kwìílá sìíntù
338	woman	mùkìímá/βàkìímá	mùkìímá/βàkìímá	mùkázì/βàkázi	mùkéémà
747	womb	lùsàáŋgò lwè mwáánà, ndà	ndà	-	ìíndà
812	word	igàámbò/màgàámbò	ìgàámbò/màgàámbò	ìgàámbò/màgàámbò	ìyàámbò
772	work as a mason	kwòòmbèkà	kùzèèŋgà	kwòómbèkà	kùjùβáká, kùjééŋgà
167	work (n)	mùlìmò/mìlìmò	mùlìmò/mìlìmò	mùlìmò	mùlìmò/mìlìmò, mùsìká
81	wrap up	kùhìná	kùgòòndà	kùgòòndà	kùhàámbá
344	wring (clothes)	kùninà, kùkámúlà	kùkámòólà	kùkámòólà	kùkámá
773	yawn	kwàáyólà	kwàáyólà	kwìyáyàmùlà	kùgájúlá
593	year	mwàáŋká	mwàáká	mwááká	mwàáká
750	yesterday	ìgòlò	ìgòlò	myéénychílò	ìsónéká
15	you (sing.)	òβé	òβé	ìwè	ùùgwè
1018	you (pl.)	ímwé	ímwé	ìmwè	ùùmwè
715	young man	mùyàándá	mùyàándá, mùsòòmbà	mùsígàzì	mùlùyàlùyà
637	your(s) (pl. 2nd) person)	yìínú	yìínú	yéényù	-éényú
693	youth	mùsùùmbà/βàsùùmbà	mùsùùmbà/ βàsùùmbà	mùsígàzì, mùhàlákàzì	mùlùyàlùyà, mùhàlá

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
292	zebra	ntúlégé	-	èèntùlègè	mbééyá ?

Appendix 1. Zone F word-list: F22

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
133	abdomen, stomach, belly	ndà	ndà	ndà	ndà
495	abscess, boil	iβìímbà	ifílá	ìpùté	ivìímbà
786a	abundant/abound	-pá	-òkálà	pà	kòkázyà
786	abundant	-pá	-òkálà	pà	kòkázyà
571	abuse, insult	-dòkánâ	-tòkílà	-tòkílà	kòtòkízyà
252	abuse, reproach	-iyójá	-tòkílà	-tòkílà	kòtòká
809	accustomed (get)	-mànìílà	-lèéndélélà	-léndèlélà	-lèéndélèlà
274	act (vt)	-ìítà	-βèézyà	-βéézyà	-ìítá
229	add up	-òòŋgèjà	-òòŋgézyà	-òòŋgèzyà	-pòmyá
927	adjacent (be); border (vi)	-βìmbíhánà	βòbìíhí	-ìhélà, -βìmbíŋkànà	lòβòómbá (n)
662	adze, carpenter's	mbìizò	mbìizò	mbìizò	mbìizò
254	affair	mùhàyò	mùhàyò	mùhàyò/mihàyò	ìgàámbò
1002	afraid (be)	-ògóhâ	-ògóhà	-ògóhà	-òògóhà
168	agriculture	kòlìmà	ìlìmà	ìlìmà	ìlìmà
926	all	-òósê	wòósè	-ðsè	-òósè
248	alter, change	-pìíndòlà	-gàlòsyà	-gàlòlà	-pìlòlà
595	animal	ndímú	nyàmà	ndìmũ	ndímú
617	answer a call	-ìdíkâ	-ìtáòkà	-ìtáùkà	kwìtááβìlà
782	answer, reply	-shòóshà	-sòβílìzyà	-ìtáùkà	-zùmyà

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
664	ant (reddish-brown biting)	shìílàámbà	sìlàámbà	síílààmbà	síílàámbà
122	ant-hill	kìgòlò	kìgòlò	kìgùlù	kìgòlò
663	ant (small)	sòóŋgwà	nyòóŋgò ?	nsóòswà	-
586	anvil	-	-	ìtyáánìlò	-
989	apply by stretching, spread over	-ßààmbà	-ßààmbà	-ßàmbà	-ßààmbà
976	appoint, set up	-ìmíkâ	-ìmíkà	-ìímícà	-
55	arm, hand	kìkònó/mùkònó	kòßòkó	gòkònó	kòßòkó
771	armpit	lyàápá	-	ŋkwápà	lyàápá
203	arrange, put in order	-ßèègélèjà	-pàáŋgá	-ßégélèzyà	-pàángá
204	arrange, put right, repair	-ßèéjâ	-ßèégélèzyà	-ßégélèzyà	-
478	arrive	-shìkà	-fìkà	-sìkà	-fìkà
665	arrow	ìsòòŋgà	ìsòòŋgà	ìsòŋgà	mwàámbì
666	arrow (head of); spear head	ìsòòŋgà	ìsòòŋgà	nsòŋgè	-
337	ashes	ìßú/màßú	màtùùndè	máwú	ivú/mávú
199	ask for	-lòómbá	-lòómbá	-lòmbá	-lòómbá
89	assemble, collect (vt)	-lòòndìkà	-sàŋgìlà	-kùmíŋgà	-chàáŋgà
789	aunt (father's sister)	sèéŋgî	sèéŋgì	sèéŋgì	sèéŋgì
148	avoid, dodge	-èèpà ?	-kwèèpà ?	-ihégà	-ßìsyá
688	awe, fear of God	ßòòßá	-ògóhà	ùjáámù	-lòómbá
667	axe	mbàsá	mpàsá	mbàsá	mpàsá
364	baboon, ape	ŋgòkò	ntòómbílí	ŋgùkù, ipóómà	ŋkòkò
634	back of (at the)	-nùmà	kónyùmà	nùmà	kòònyùmà
297	back	m(ù)gòòŋgò	mùgòòŋgò	m(ù)gòòŋgò	mùgòòŋgò
297a	backbone	m(ù)gòòŋgò gwà múgáti	mùgòòŋgò	m(ù)súŋkílò gwá m(ù)gòòŋgò	-

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
27	bad	-βí	-βí	-βí	iβí
37	bad (become), rotten (vi)	-βòlà	-βòlà	-wòlà	-βòlà
87	bait	chàámbó	chàámbò	càmbò	chàámbò
398	banana (plant)	ìdòòkè	ìdòòkè	m(ù)dòòkè	m(ù)dòòkè
397	banana (fruit)	ìdòòkè	ìdòòkè	ìdòòkè	ìdòòkè
399	banana (for cooking)	ìdòòkè	-	ìdòòkè	màdòòkè
1005	baobab	ŋwàándó	-	mbùyù	mbùyù
1022	bark (of tree)	ìgólà	ìgólà	ìgólà	ìgólà
313	barren (of living being)	mùgòòmbà	mùgòòmbà	m(ù)gùùmbà	mùgòòmbà
314	barren (of land)	lyáà bó	hàà ywá	kìlááŋgà	-
376	base of tree-trunk	ìtìná	ìtínà	ìtínà	ìtínà
650	bask (in the sun), warm oneself	-òòtá	-òòtélà	-òòtélâ	kwìyóóntá
576	basket of open wicker-work	ìsàánzò	ìsàánzò	ntúúŋgà	ìtʊ́ʊ́ndʊ̀
577	basket (plaited)	kìkàpó	kìkàpó	ŋkàpó	kìkàpó
643	bathe	-òògá	-òògá	-òògá	kwòògá
498	be fitting, behove	kìsògá	-fààyà ?	-íkʊ̀ʊ̀βʊ̀kánílè	-fààyà
1	be, become	-βí	-βá	-βá	kʊ̀βá
955	beach, coast, shore	ŋwàáni	hwàáni	ŋhwàáni	mpwàáni
827	bead(s)	βʊ̀sàló	wàámbó	wàámbò	wàmbó
416	bean, kind of bean (from *Phaseolus vulgaris*)	shìíli	kàpàlà	kàfùtò	kàpàlà
417	bean, small (from bean plant)	màhàlàgè	màhàlàgè ?	màhàlàgè	màhàlàgè
844	bean (runner)	-	kàpàlà	nsííli, kàpàlà	kàfùtò
1037	bear child	-βyàálâ	-βùtá	βyáálá, ìpékòlà	-βùtá

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
147	beard	ndèzù	ndèzù	ndèzù	kàlèvù
768	beat	-tòlá	-gùmà	-gùmà	-gùmà
759	beautiful	-sògá	-sògá	-sògà	nsògá
162	bed	βòlìílì	òlìílì	ùlílì	kìtándà
161	bedstead	βòlìílì	òlìílì	ùlílì	tòtàántá
653	bee	nzòkí	nzòkí	nzùkí	nzòkí
775	beer	wàlwá	wàálwá	màálwá, wàálwá,	βòsèlè
497	befit, suit	-βéégéjà	-βèézyà	-βéélélwá	-nòzyá
101	below, underneath	hàásí	hàánsì	m(ù)kùlùlì	hàánsí
186	bend, twist (vi)	-ìgòóndâ	-gòòndà	-ìgómà	-
468	bend (vt)	-ìgòóndâ	-pèétà	-gòmà	kwèèlòòlà?
193	bewitch	-lògà	-lògà	-lògà	-lògà
930	bifurcation, cross-roads	nzìlà màákà	-	kàmàákà	màákà
222	bile	ndòlìlà	-	ndùlílà	-
262	bind up, splice	-làgòlà	-	-pìzyà, -tùŋgá	-tòóŋgá
658	bird-lime	shèèŋgò	òlémbò	wìléémbò	òlèémbò
811	bird	nònì	nyònì	nònì	nyònyì
46	birth (give), to a child	-βyàálâ	-βùtá	-ìpékùlà, -βyàálá	-βùtá
125	bite	-lùmá	-lùmá	-lùmá	-lùmá
221	bitter	ndòlò/-lòlò	-lòlò	ndòlò	ndòlò
223	bladder	chàásù	-	ìtòndìzyò	-
482	blind person	m(ù)hòfù	mpòfù	mùhòfù	mpòfù
669	blood	m(ù)gàzì	m(ù)gàzì	m(ù)gàzì	mùgàzì
496	blow on, blow up	-fùùlà	-pùùlà	-fùlììzyà	-pùùgà
238	blow bellows	-gùβà	-fùkùtà	-tùgùtà	-vùkùtà
463	blow away	-lùúshâ	-pèétà	-hèhélòzyà	-hèhá
776	boast, brag, praise oneself	-ìgàámbâ	-βèézyà	-ìkúmálózyà	-ìkúmyá

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
676	boat	lyààtó	-	màshúwà ?	wàátó
670	body	mùβìlì	m(ù)βìlì	mùβìlì/mìβìlì	mùβìlì/miβìlì
581	boil up	-dùdùmòkà	-sìβòkà	-pògòmà	-sìβòkìlà
30	boil (vt)	-sèβyà	-sèβyà	-sèβyà	-βìzyà
433	bone	ìgùhá	ìgùhá	ìgùhá	ìfùpá
564	bore a hole	-dòlá	-dòlá	-dòlá	-dòlà
1008	born (be)	-βyàálwâ	-βùtwá	-βyáálwà	-βùtwá
910	borrow	-gòpà	-kòpà	-gòpà	-kòpà
872	bottle	nsòpá	nsópà	nsòpá	nsópà
928	boundary	lòβìímbí	lòβìímbí	lòβíímbí	lòβòómbá
671	bow, bending	βòtă	βòtá	ùtà, kwìhínà	βòtá
508	bow	βòtă	βòtá	ùtá	βòtá
953	bowstring	lògòyè	lògòyè	-	lógòyè
58	brain	βòòŋgò	wòóŋkò	wõŋkò	βwòóŋkò
509	branch	ìtàámbí	ìtàámbí	ìtámbí	ìtàámbí
375	bread	m(ù)gàátè	m(ù)kàátè	mùgàátè	mùkàátè
831	break wind *	-nyà	-nìà ífùzì	-fwàtòlà	-nìà ìfùzí
77	break, snap	-βìínzá	-pùtá	-βèlá	-βèlá, -vùná
1036	break wind	-nyà	-nìà ífùzì	-fwàtòlà	-nìà ìfùzí
17	breast (of a woman)	màβéélê, màdùtú	màβèélé	màβéélè	màβéèlè
489	breath, breathing	myààyò ?	myòòyé	myòòyé	mùhèèmò
490	breathe, rest	-èshèèmà	-èsyèémà	-êèsyèèmà	-hèèmà
138	bridge	lyàándí	ìdàlájà ?	ìdálájà	ìdàlájà
139	bridge (wooden)	ìkìíŋgó	-	ìβòtílò	-
885	bring, fetch	-èèhà	-lèétá	-lèétà	-lèétà
171	bring to light	-βùùndà ?	-	-	-
882	bring up (a child)	-lèémbá, kòjá	-lèlà	-lèlà	-lèlà
660	brook, stream	kàmòóŋgò	mòòŋgó	kàmòòŋgó	mòòŋgó

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
942	broom	m(ù)tèéyú	m(ù)tèéywé	m(ù)téyè(njè), céèyò	-
113	broth	m(ù)sòzí	m(ù)sòzí	m(ù)sòzì	mùfwá
381	brother-in-law, sister-in-law	shèmèéji ?	m(ù)kwèélà	m(ù)kwélà	mùkwèélà
341	brother (older)	m(ù)kòló	mùkòló	m(ù)kòló	ìlòòmbó
673	brother, relative, fellow-tribesman	m(ù)dògó	mùdògó	m(ù)dògó	mùdògó
874	bruise badly, take the skin off	-ikúlúmbòlà ?	-tyòòβòlà	-kùβòlà	-
71	buffalo	mbògó	mbògò	mbògò	mbógó
807	build	-zèèŋgà	-zyèèŋgà	-zyèŋgà	-zèèŋgà
674	bull	iyàgáámbà	nzàgámbà	nzàgámbà	-
80	bunch (of hair)	m(ù)sìnzí, màywìílû	mùsìnzí	m(ú)sìnzì, màlúndò	-
890	burden, load	m(ù)ligó	mùlìgó	m(ù)lìgò	mùlìgó
645	bum (vt & vi)	-βàká	-βàká	-βàká	-βàká
231	bumt (become)	-pyá	-βàká	-zìgá	-zìgà
179	bury	-jìǐkà	-zyìǐkà	-zyìǐkà	-zìǐkà
555	bush	ìpòólú	ìpòólú	ìpòòlú	ìpóólú
21	buttermilk	chàáβâ	mbóβòtò	mbóβòtò	-
514	buttocks	ìdàkó/màdàkó	ìdàkó/màdàkó	ìdàkó/màdàkó	ìtàkó/màtàkó
301	buy	-gòlà	-gòlà	-gùlà	-gòlà
873	calabash	nsòhá	kìkòòndò/ vìkòòndò	kíkòndò, ìkòndò	sìkòóndó/vìkòóndó
857	calf of the leg	nsàlútà	-	lòsàlútà	nsàlólâ
877	calf	kàdàmá	ndàmá	ndàmá	ndàmá
31	call	ìitánà	-ìtánà	-ìtánà	-ìtánà
675	canoe (dug-out)	lyàátó	ŋgàláβá ?	ŋgàláβá	ìpàáŋgò
602	canoe	lyàátó	lyàátó	lyátó	wàátó

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
993	carry a child on the back (in a blanket)	-hèèkà	-pèèkà	-pèèpà	-pèèkà
567	carry/lift on to head (take up) a heavy load	idwííkà	-ìtwííkà	-ììtwííkà	-ìtwíìkà
97	carry astride on the hip	-hèèkà	-pèèkà	-tìgíkà	-ɓʊ́ʊ́syà
560	carry, take	-sòlà	-sòlà	-sòómbá	-sòlà
578	carry, convey	-sòómbá	-sòómbá	-sòómbá	-sòómbá
104	cat	nyàáßù	nyàáù	nyááßù	nyàáßù
286	cattle	mìtùgó	mìtùgó	-ßìsáwá	mìtùgó
486	cease, finish	-shìlá	-màlà	-màlà	-màlà
526	centipede	nyènzélèélè	-	ìtántàßí ?	nzùmààlì
247	change, turn round	-kéßélà	-gàlʊ̀kà	-gàlʊ̀kà	-pìlʊ̀kà
334	charcoal	màkàlá	m(ù)kàlá	ìkàlá/màkàlá	mùkàlá/mìkàlá
963	charm (esp. to ensure wife's fidelity) (n)	lʊ̀kòmòólâ	-	lʊ̀kàgó	-
32	chase (away)	-pèèjà	-pèèzyà	-pèèzyà	-lìindà
515	cheek	ìtàmá	ìtàmá	ìtàmá	ìtàmá
92	cheerful (become)	-tògwá	-chàáŋgàmùkà ?	-zàámà	-sàáŋgáßálà
106	cheetah	ìmòóndó	-	ìßàlàßálá	-
585	chest	kìkùßá	kìkúßà	kìkùßá	sìfùßá
672	chest (of animals and birds)	kìnìlìnì	kìdálì	kìkùßá, kìdáli	-
431	chief, headman	m(ù)tèmí, m(ù)hànyâ	mùtémi	m(ù)tèmí	mùhányà, mùkʊ̀lʊ̀
431a	chief	m(ù)tèmí	mùtémi	m(ù)tèmí, mwànááŋgwà	mùtèmí
679	child, infant	ŋwàáná	mwàànà	mwàànà, kàkèkè	mwàànà
597	child, offspring	ŋwàáná	mwàànà	mwàànà	mwàànà, lʊ̀ßùtó
886	chin	kìlèzù	kìlèzù	kìlèzù	kàlèvù
83	choose	chààgʊ̀là	-sàágʊ̀ʊ̀là	-sàágʊ̀là	-sàágʊ̀là

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
109	civet cat	itùùŋgò ?	-	-tùùŋgò	-
255	clan	lòdògó	βòkóò ?	ìgóóŋgò	βòkòó
841	climb, ascend	-fèèhèlà	-pàlàmìlà	-líínà	-kòtàándá
550	clod, lump	ilòóŋgò	ilóóŋgò	ìwóómbá	ìlóòŋgò
851	close (the eyes, mouth, etc.)	-fùùmbà ?	-lùgàlà	-kùndíkìlà	-tìíndílà, -mùmyá
299	cloth	kìtàámbàálà	kìtámbàlà	kìtàámbàlà	sitámbàálà
235	clothe	-zwìíká	-zwìíkà	-zwííkà	-vwííkà
300	clothes, material	ŋwèndá	mwèndá	mwèèndá, myèèndá	mwèndá
305	cloud	ilùùndè	ilùùndè	ilùùndè	ilùùndè
817	coagulate	-gàándà	-gàándà ?	-gàándà	-gàándà
941	cobra (spitting)	swìílà	nswìílà	nswíílà	nswíílà
906	cohabit	-itòómbâ	-iyáánzà	-ìikálà ná múhàli wàkwè	-
465	cold	mbèhó	mbèhó	mbèhó	mbèhó
624	come	-ìizà	-ìizá	-ìizà	-ìizà
505	come on suddenly, take in the act	-díímā, -sàŋgànìjà	-díŋyà	-sàŋgànîkízyà	-díímà
230	construct, put together	-βèéjâ	-βèégélèzyà	-βèézyà	-βèézyà
471	cook	-zùgá	-tèékà	-tèékà	-tèékà
557	cook in water or fat	-pògómyà	-sèβyà	-pògómyà	-pòtòmyà
43	cooking pan, small	kìsèmè	ìfúlílà	nyúúŋgò	nsòómpó
385	cool (become); get well	-pòlá	-pòlá	-pòlá	-pòlá
265	copper, brass	shàβâ	shàbà ?	-	shàβá
283	copy a pattern	lòndèlèjà	-lòòndèlèzyà	-lòndèlèzyà	-lòòndèèzyà
894	cork, stopper	kikùndíkíjò	-	m(ù)fúndíkìzyò	kiβízyò
52	corpse, carcass	m(ù)zógà ?	-	m(ú)làmbò	mùlàmbò
1001	corpse (human)	màìtì ?	mùyàgi	m(ú)làmbò, mùβímbà	mùlàmbò, mùβiímbá
383	cough (vi)	-kòlólâ	-kòsólà	-kólòlà	-kòlólà

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
4	count	βàjà	-βàzyà	-βàzyà	-βàzyà
100	country (our)	nsí	nsí	nsí	nsí yìtó
14	courtyard	lòβógà	ùwánjà ?	iséésà	lòβàánzá
852	cover (up)	-kùndíkíjà	-kùndíkìlà	-kùndíkìzyà	-βùndíkìlà
285	cow	ŋòòmbè	ŋòòmbè	ŋòòmbè	ŋòòmbè
1003	coward	ŋòòβá	mwòòβá	mwòòβá	mwòòβá
335	crab	-	-	kànyàlòɡéégé	-
520	crawl, creep	-ihwéégà	-tàmbálàlà	-ààgúúlà	-ààgúúlà
612	cricket	kìnyènzélèélè	m(ù)zénzéní	m(ù)zíínzílí	-
153	cripple	sùúnhì	mùlèmá	m(ù)lèmá, βàlèmá	mùlèmá
803	crocodile	ìmàámbá ?	ŋwìînà	ŋwìînà	-
319	cross (a river)	-βìtá	-βìtá	-táámbókà	-tààmbòòkà
846	crow (n)	ŋhòŋgólò	ìkòóŋgòló	ìkúúŋgùùlù	ŋhwáhwà
308	crown of the head	-	-	mpàándà	mpàándà
79	crumple	-kòónjá	-	-	-vùúŋgá
370	crush by pounding, pulverize	pòòndàpòòndà	-pòólà	-tùná, -βàzáŋgà, -βèlá, -tùnàŋgà	-
393	crust	nzìgìîlwà	ŋkòkótó	mákòkòló	òkwàáŋgólò
160	cry, wail	-lìlà	-lìlà	-lìlà	-lìlà
966	cucumber, small	mòóŋgó	-	kàtàŋgà	kàtàáŋgà/màtàáŋgà
736	cudgel	ilàáŋgà	m(ù)kòmá	βòhìlì, ìgóóŋgò	ìgóóŋgò
165	cultivate	-lîmà	-lìmà	-lìmà	-lìmà
950	cure, cool, heal	-pòjá	-pòzyá	-pòzyá	-pòzyá
355	cut	-tînà	-pùtá	-pùtá	-tèmá
98	cut, lop	-tèmá	-	-pùtáŋgìlà	-kèénzá
117	cut to shape, sharpen to a point	-pòónzá	-pòónzá	–pòónzá	-pòónzá
365	dance (of men, to show courage)	-ishìînyá	-	-ìkúmáálòsyà	-

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
53	dance	-βìná	-sàápà	-sàápà	-sàápà
622	dark, black	yàápì	-pì, -làβózú	-pì, wìlàβózú	-àapì, ìláβólé
481	darkness	giìtí	giìtí	giìtî	lìzímà
824	dawn (vi)	-èèlá	-syá	-àŋgálòkà	màkiíŋgílímá
359	dawn, daybreak	màkìŋgílímá	-wèélá	mákíŋgìlìmà	màkiíŋgílímá
744	day after tomorrow	màzòólí	màzòólí	màzóólí, igóló yáákwé	màzòólí
130	day	lòshíkò	lòsíkò	lòsíkù, nsikù	nsikó/lòsíkò
682	day-time	lìlìmì hágátì	hàápé	lyòòβá	múlyòòβá
869	day (all)	lìlìmì dwí	lòsíkó lòzìmá	lyòòβà zélélè	lòsíkò lòzímà
751	day before yesterday	màzòólí	màzòólí	màzóólí	màzòólí
423	dead person	wà βòfé	m(ù)yàgì	mùβìimbà, m(ù)láámbó	m(ù)fú
424	death	lòfú	lòfú	lòfú	lòfú
931	decorate	-βèègélèjà	-pàámbá ?	-βééléézyà	-nògélèzyà
446a	defecate	-nyà	-nìà	-nìà	-nìà
631	denial	mùlèmò, -lèmà	kòkàánà	kòkáánà, ikáánò	kòkáánâ
821	deny	-lèmà	-kàánà	-kàánà	-kàánâ
648	destroy, spoil	-βìípyâ	-βìípyà	-βìípyà	-βìípyà
437	dew	lòmè	lòmè	lòsàáŋgù	lòmè
219	die (cause to); put to death *	-βòlájâ	-wòlágà	-wólágà	-βòlágà, -fwìisyà
1027	die *	-fá	-fwá	-fwá	-fwá
425	die	-fá	-fwá	-fwá	-fwá
504	dig up, dig out	-fùkòòlà	-fùkòòlà	-fùkòòlà	-fùkòòlà
503	dig	-sìlìmbà	-sìlìmbà	-sìlìmbà	-sìlìmbà
466	diminish, grow less	-pòŋgòlâ	-dòóhà	-dòóhà	-pòóŋgókà
635	dip	-kòjá	-kòzyá	-dòvyà	-kòzyá
49	dirt	màkó, βòcháfù ?	ùchàfú ?	ùtàkàlà	màtàkàlà, màkwé, màfítá
680	district, province, country	igòóŋgòlí	nsí	igũŋgúli	igòóŋgóli

No	English	KìDàkámà	KìNyànyèèmbè	KìKòndòŋgò	SiGàlàgàánzà
245	divide	-gàβòlà	-gàwòlà	-gàwòlà	-gàβòlà
512	divorce	kòlèkàánà	-sàgà	-lèkàánà	-lèkàánà
367	do, complete, finish	-màlà	-màlà	-málà	-màlà
366	do	-ìtá	-βéézyà	-βéézyà	-ìtá
60	dog	iwá, mbwá	mbwá	mbwá, mbwégésé, m(ù)kwíyíyí	mbwá
292a	donkey	nzòβé	pùùndà ?	ndògóβé	-
685	door	ilùgàlìlò	m(ù)làáŋgò	ilímbá	m(ù)zigó
415	dove (red-eyed)	mhùùndà	nkùúndà	ŋkúúndà	ŋkùúndyà
188	doze	-tiíndílà	-tíndílà	-tíndílà	-tíndílà
529	draw water (from well)	-dàhá	-dàhá	-dàhá	-dàhá
215	dream (vt, vi)	-lòótà	-lòótá	-lòótà	-lòótélà
328	dream (n)	kìlòótí	ndòótí	ndòótí	ndòótí
448	drink	-ŋwá	-nywà	-ŋwá	nywǎ
196	drizzle	màmàtò	màtòònyé	màtóónyé	-
780	drop, throw down	-tùùŋgólá	-sùùŋgólà	-ìcá	-pàlá
284	drum	ŋòmà	ŋòmà	ŋòmà	ŋgòmà
598	dry (vt), set out to dry	-àànìkílà	-àànìkìlà	-ànìkìlà	-àànìkìlà
346	dry	-ààbó	chà ywá	-kàzú	-gòmé, hàlàmé
954	dry up, ebb	-òòmá	-kàlá	-póóŋgólà	-òòmá
345	dry up, become dry	-òòmá	-kàlá	-kàlá	-òòmá
289	duck	mbàátà	mbàátà	mbàátà	mbàátà
243	dust, cloud of dust	lòβùúβú	lòβòóβó	lòβúúβú	lòβùúβú
628	dwell	-iikàlà	-iikàlà	-iikàlà	-iìkàlà
492	eagerness, zeal	tàmâ ? ŋhòló	-	wááŋgòwáŋgó	mááŋgòmááŋgó, mìlòsó
491	eagle, bird of prey	lòβálá ?	-	póóŋgò	ndèèsì
563	ear	ìtwì	ìtwí	ìtwí/màtwí	ìtwí, màtwí
70	earth, land	sí	nsí	wùlóŋgò	nsí

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
44	earthenware vessel for serving up food	nùúŋgò	nyùúŋgò	kìsèmè/vìsèmè, nsómpó	nùúŋgò
156	eat	-lyá	-lyà	-lyá	-lyá
900	effort, exertion	ŋgùzù	-	ŋgùzù	nàgá
273	egg	ìgí/màgí	ìgí/màgí	ìgì/màgì	ìgí
443	eight	mùnàáné	mùnàáné	m(ù)nááné	m(ù)nááné
705a	elbow	nyàánzwì	-	kàkókóólà, tùkó	kàkòóŋkòlá
329	elephant	mhòlì	nzòvù	mhúli, nzòβù	nzòvù
336	embers	ikàlá/màkàlá	ikàlá/màkàlá	ikàlá/màkàlá	ikàlá/màkàlá
842	embrace	-kùmbátílà	-kúmbátílà	-fùmbàtà	-kùúmbátílà
394	end (come to an), cease	-màlà, -òyà	-	-màlà	-pèlá
952	escape, recover	-pìlà	-pìlà	-pìlà	-pòlògùkà
899	examine, measure, test	-pìimà, -òlà	-pìimà	-pìimà	-pìimà
45	excrement, dung	mààfí	mààví	mààví	mààví
958	exorcise, drive out a devil	-ìsèéŋgá	-	-kìindìlà	-sàná
784	explain	-ìyéléjá ?	-èèlézyà ?	-yòòmbà, wífílà	-wífílà
620	eye	ìiìsò	ìinsó/minsó	liinsó/màánsó	liinsó/miinsó
828	eyebrow	ŋgòhé	ŋgòhé	kúúnzì	-
838	eyelash	ŋgòhé	ŋgòhé	ŋgòhé	ŋgòhé
587	face downwards	-βùndáálá	-	-úndáálà	-βùùndáálà
686	face	βòshó	òsyó	òsyó	βòsyó
940	fade, disappear	-zìinzìílà	-	-lèká kwígèlá visògá	-fùβá
891	faint, lose consciousness	fá káβimbá ká ŋgi	-	-fùtá myóóyé	-zimílá
298	fall	-gwà	-gwà	-gwà	-gwà
549	fall short	-lèβélà	-tindíkìlwà	-dóóhà	-pòóŋgólá

No	English	KíDàkámà	KìNyànyèèmbè	KìKòmòòŋgò	SiGàlàgàànzà
462	fan, wave	-pùùgìlìlà	-pùùgìlìlà	-pòòŋgà	-pùùgà
764	far	kòlè	kòlè	-kòlè	kòtàlí, kòlè
921	fat (be) (of animals)	-nònà	-nònà	-gìnà	-gìnà
922	fat (of animals)	-nònú	-gìnà	-gìnà, -nònú	-nòné
531a	father	βàáβá	βàáβà	βàáβà	dàádà, βàáβà
382	father-in-law, mother-in-law	βàáβá/màáyò βókwì	βàábà/màáyò βókwì	m(ù)kwíŋgwà	βàáβà/màáyò mùkwé
531	father (my)	βàáβá	βàáβà	βàáβà	dàádà, βàáβà
687	fear	βòòβá	wòòβà	wòòβá	βòòβá
652	feathers, fur	màyòyá	wòòyá	màyòyá	βòòyá
848	fence, enclosure	lòóβá	lòóβà	-	lòóβà
858	ferment, turn sour	-gààsà	-gààsà	-gààsà	-gààsà
762	few (a), not much	ndó	-dó	-dõ	ndó
757	fierce, sharp	ndàkì	-dàkì	-dàkì	-kàlí
421	fig-tree	-	-	-	-
422	fig-mulberry tree	mùkóyò	m(ù)kóyò	m(ù)kòyó	mùkóyò
216	fight	-itólá	-ìigúmà	-ìgúmà	-ìgúmà
804	fill	-òòkájâ	-òòkázyà	-òkàzyà	òòkázyà
176	fill a hole, stop up	-chìβá	-kìβá	-kìβá	-zìβìlà
583	filter, strain	-kèmékâ	-kàmá	-kènénà	-swììzà
50	filth	màkó	-	ùtàkàlá, màtàkàlá	màfitá, màkwé
516	final, decisive	-màlà	-	-màlà mpèló	mpèló
760	fine, excellent	-sògá	-sògá	nsògá	nsògá
447	finger	lyàálá	lyàálá	lyàálá/màálá	kàálá/màálá
323	fingernail	lònóóŋgá	nzàálá	nòóŋgá	lòzàlá/nzàlá
474	fire	mòótó	mòótó	mòótó	mùlílò/mòótó
280	fireplace, hearth, kitchen	líikó	líikó	líikó	líikó, sipèémbó

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
970a	firewood (collect, cut) (vt)	-tèmá	-pùtà	-tííβà ŋkwí	-tàándòlà ŋkwí
413	firewood	lòkwí	lòkwí/ŋkwí	ŋkwí	ŋkwí
191	fish up, pull out	-zùβà	-iipòlà	-zúmbòlà	-zùβòlà
126	fish (old Swahili *nswi*)	ndìílô	sàmáki ?	nsòómbá, nswí	nsàmáki, nsòómbà
190	fish (vt), trap fish	-zùβà	-zùβà	-tègá, -zùβà	-lòβá
400	fist	ŋgùmî ?	ŋgúmì ?	ŋkùùnzì	ìŋgúó
525	five	sàánó, ìtàánô	ìtáánò	ìtáánò	ìtáánò
493	flap wings wildly, flutter	-pùùgílà ?	-	-pùtáŋgá	-pàpàpílà
832	flatulence	-βiimbéélwá	-βiimbéélwà	-βíímbéélwà	-víímbélwà
384	flavoured (be properly)	-tèèŋgànìlà	-kòlèélà	-βèélà, -sèèmà	-kòlèélà
907	flower	iúwà/màúwà ?	màúwà ?	ilùβà/màlùβà	ìúwà/màúwà
278	fly (house)	ìgí/ŋgí	nsààsí	m(ù)sàázì, nsàází	nsàázì
1028	fly (vi)	-làlá	-lòóká	-làlá	-gòlòkà
1032	foam *	màfùló	ifùló	màfùló	ìfùló
502	foam	màfùló	ifùló	màfùló	ìfùló
143	follow (in order)	-lòòndèèlà	-lòòndà	-lòòndèèlà, -lòòndà, -kòòŋkòmà	-lòòndèzyà
142	follow	-lòòndèèlà	-lòòndà	-lòòndà	-lòòndèzyà
823	food supply for a journey	màsàáŋgú	mpámbà	máságú	mpàámbà
556	forest	ìpòólú	ìpòólú	ipóólú	ìpòólù, ìsòkòòlà
584	forge	-póóndà	-kùβá	-sùlá	-
889	forget	-ìtíβílà	-làβílà	làβílà	-làβíílà
458	fork, bifurcation	màákà, mbàánhí	màtàámbí	mhágwà	mpàántí
442	four	ìné	íinè	íné	íné

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
295	frog	chòòlá	chòòlà	còlà	chòòlá
574	fruit	kìsùmò	-	kìsúβò	-
349	fry	-kàlàáŋgá	-kàlàáŋgà	-kàlíŋgà	-kàlááŋgà
936	fully developed, be	-kòlá	-kòlá	-kòméélà	-kòméélà
625	full (become)	-òòkálâ	-òòkálà	-òòkálà	-òòkálà
316	garden	βùsitáání ?	βùsitàání ?	isààyí	bùsitáni ?
419	gather (flowers, fruit)	-sòògòlà, -yòβà	-yòβà	-yàβà	-yàβà
91	gathered (be), assembled (be)	-ikùmííŋgâ	-sàáŋgyà	-ikùmííŋgà	-ikùmííŋgà
368	gazelle (Grant's)	nshà ?	-	mpóónzò	nsyá
454	gazelle, small (impala)	mòòŋgè	-	mpàlàpàlà	-
108	genet (kind of speckled civet cat)	ìtùùŋgò	ìtùùŋgò	ìtùŋgò	ifùùŋgò
408	get, obtain	-pàándìkà	-pàtà ?	-pàándìkà	-pàándìkà
684	ghost, sudden apparition	mìzímú	-	mìzyókà	mùzyóókà
568	giraffe	ntwíígà	ntwíígà	nwíígà/ŋwíígà	ntwìígà
246	give away (present)	-fùmyá	-fùmyá	-ísééŋgá, -fùpá	-fùmyá
449	give	-ìmhá	-pá	-pá	-pà, -pèèlézyà
916	give light to	-twíímà	-mòlíkà ?	-mùlíkà, -kèèŋgèèsyà	-mòlèkà
815	glide, trickle	-ìídìkà	-sòlólà	-tónyékèlà	-vwà
269	go	-jà	-yà	-yà	-yà
639	go in, come in, enter	-íiŋgílà	-íiŋgílà	-iŋgílà	-ìiŋgílà
63	goat	mbòlí	mbòzí ?	mbòlí	mbòzí
694	goat, (he-)	ìtòlàáŋgé ?	-	ŋgúlààtì	ŋgùlààti
695	god	sèéβá	mùlùùŋgù	mùlúúŋgù	-
758	good	-sògá	-sògá	nsògá	nsògá

No	English	KìDàkámà	KìNyányèèmbè	KìKònòòŋgò	SiGàlàgàànzà
388	goshawk (East African) (*Astur tachiro*)	lòβálà	-	lùβálà	-
68	grain (of cereal)	lòβìyó, lòβèké	lòβèké	mpèsé	lòpèsé
696	grandfather	gòòkô	gòókò	gùúkù	gùúkù
697	grandmother	màámâ	màámà	màámà	màámà
432	grasp, hold in arm	-kùúmbátílà	-kùmbátìlà	-díímà	-vùùmbátâ
698	grass, reeds	ìswà/màswà	màswà	màswà	màáwáásì
406	grate	-kwàálà	-kwàáŋgólá	-kwàánùlà	-kwàáŋgólà
409	great, powerful, big	ìhányâ	-hányà	ŋkólló, -kòlló	-kòlló, -hànyá
164	grief, sorrow	-	mísàáyò	kònywàágàlà	-
371	grind (grain with a millstone)	-shà	-syà	-syà	-sìà/-syà
372	grind coarsely	-hàlàlà	-pàlàzyà	-pàlàlà	-pàlàlà
212	groove, furrow	mùlàlà	-	ŋkúlúlú	-
801	ground, cultivated	mùgòòndà	mùgòòndà	m(ú)gùùndà	mùgòòndà
405	grow up, get large, become great	-kòlá	-kòlá	-kòlá	-kòlá
913	grow (of plants)	-mèlà	-mèlà	-mèlà	-mèlà
461	grown (be fully)	-kòlá	-kòlá	-kòmèèlà	-kòlà
373	gruel, light porridge	hòómbâ	mùntá	ŋhóómbà	ŋkòómbà
358	grunt, grumble	-kùmyá	-sìímà	-kìímà	-kùmyá
205	guide aright	-hànà	-hèémbékà	-lòóndòólà	-lòòŋgòòzyà
351	guinea-fowl	ŋhàáŋgá	ìkàáŋgá	ŋkáànŋgá	ŋkàáŋgá
701	gun	ŋgòóhó	ŋgòóhó	m(ù)ndóózì, ŋgòòhò	ŋgòóhó
702	hair	lòywíílì	lùnyèlè/nyélè	lònyèlè/nyélè	lònyèlé
977	hair (long straight- of animals and Europeans)	nzwíílì ?	òsìíŋgá	ùsííŋgá	lòsìíŋgá
75	hair (white, grey)	mvī	mví	mvwí, mbwí	lòvwí/mvwí

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
703	hand (flat of)	ìpí	ìkóófi ?	kìgánzà	ìkóófi
157	hand, right	kòlìílà	kómùlyílà	m(ù)líílà, m(ù)lyíílà	kòlìílà
439	hand (left)	kòmósò	kómùmósò	m(ù)mósò	kòmósò
476	handle, haft	mùpìní	m(ù)pìní	mpìní	mpìní
779	hang in mid-air	-ènèénà	-ènèénà	-nìŋgèèlà, -nìŋgìnìlà	-èènèénà
655	hard	ilàámbú	ndàámbú	ìlàmbú	ìlàmé
377	hardship, distress	màkòyé	màkòyé	lòdùkò	màkòyé
294	hare	βòŋàándò	kásògóyá ?	òŋàándò, m(ù)nàsàyàáyì	-
781	haste	màáŋgòmàáŋgò	wàáŋgò	wáŋgò	màáŋgò
795	hate, detest	-chìlwà	-gàyà	-kìlwà	-gàyà
700	hay	màswà	-	màswà màkàzú	màáwáási màlàmé
678	head, chief person	mùhányá	mùhányà	m(ù)kòló, m(ù)hányà	mùhànyá, m(ù)kòló
356	head	mùtwé	mùtwé	m(ù)twé	mùtwé
352	head-pad	ŋgàtá	nzíŋgá	ŋkàtá	ŋgàtá
561	heap	ilòòndò	ìlòòndò	ìlòndò	ítùmbì
391	heap up, ready/set on fire	-βàchá	-pèèmbá	-pèmbá mòòtò	-pèémbá
623	hear	-ìigwá	-ìigwá	-dègélèkà	-ìigwá
543	heart	mòòyò ?, hòló	mòòyò ?	m(ù)tìmá	mòòyò
944	hearthstone for putting pots on	màfigá, màtùúgè	màfigá	ìfigá/màfigá	ìfigá/màfigá
893	heavy, serious, dull	itìimbú	-tylìmbú	-tìmbú	itìimbé
705	heel (of foot)	ipàándìjò ?	-	kàììnzìlà	-
681	heifer	mòógâ	ndògòòsà	ndògòòsà	-
418	hem, make a border	-pìíndà	-kòónjá	-pìndà	-kòónzá
690	hen, fowl, chicken	ŋgòkó	ŋkòkó	ŋkòkó	ŋkòkó
766	here	hèénàáhá	hànó	àhà, ùkò	àhà, òkò
863	hiccup	kisékúsèkú	-	kììsákwì	kàànsèkú

No	English	KɪDàkámà	KɪNyànyèèmbè	KɪKònòòŋgò	SiGàlàgàànzà
800	hide (vt)	-βìsá	-βìsá	-βìsá	-βìsá
38	high, be (of meat)	-βòlà	-gùùndà	-gùùndà	-βòlà
326	highway	ìbàlàbálà ?	nzìlà	nzìlà ŋhànyà	-
309	hill	lògòlò	-	kàlàgòlò	lògòlò
925	hip	-	m(ù)kɪ́ímbìlì	nyòòŋgà	-
317	hippopotamus	ìtómóómbò	kìbóókò ?	ntómómbò	ntòómòòmbó
396	hit with a hammer	-pòòndà	-	-tòlà	-gùmà
706	hoe	ìgèèmbè	ìgèèmbè	ìgèmbè	ìgèèmbè
990	hold, arrest	-dìímâ	-dìímà	-dìímá	-dìímá
575	hole, nest	ìdòlólò	ìdòlòlò	ídòlólò	líínà, ìdòlólò
836	hollow out	-dòlá ?	-kòómbá	-kómbélèlà, -dòlá	-kwàáŋgólà
816	home	kòkàáyá	kòwìswé	kò wìswé	kòwíítí
654	honey	βòòkí	wòókí	wòòkí	βòòsí
150	honour	-kòjá	-	-kòzyá, -sòndóhyà	-kòzyá
797	hook (for pulling down branches in plucking fruit)	mùgùùtà ?	-	ndòβógò ŋkòntòzyò	-
189	hook (fish)	ndòβánó	ndòwánò	ndòβàànà	ndòβáánò
707	horn, ivory, tusk	ìpèémbé	ìpèémbé	ìpèémbé	ìpèémbé
288	horse *	-	-	twàŋgà βòléndè	fàlààsì ?
708	house	nùúmbà	nyùúmbà	núùmbà	nyùúmbà
263	how many?	zìíŋgà	-ìíŋgá	zìíŋgà	zìíŋgà
572	hump (of hunchback)	ìgóóndè ?	-	lògúkú	-
573	hump (of cow)	lògùkú	-	lògúkú	-
756	hundred	ìgánà	ìgànà	ìgànà	ìgànà
320	hunger	nzàlà	nzàlà	nzàlà, mìsyóólò	nzàlà
33	hunt	-hìígâ	-βèéndá	-βééndá	-hɪ́ígà

No	English	KìDàkámà	KìNyányèèmbè	KìKónòòŋgò	SiGàlàgàánzà
34	hunter (professional)	mùhíĭgí	mùβèéndí	mùβèéndí, m(ù)híígì	mùhĭígî
35	hunting	ìhĭĭgílò	òβèéndí	ùβééndí	βòhĭígî
227	husband	mùgòóshà	m(ù)gòóshì	m(ù)góósí	mùlùmé
808	hut	nùúmbà	nyùúmbà	kànúúmbà, kàtùúntù	ìβáándà
709	hyena	mbìtí	mbìtí	mbìti	mfisí
1016	I	nèéné	èéné	nèéné	èéné
1013	idleness, sloth	βòzòβú	ùvílà	óvílà	βòzòβé
901	ill (be); groan	-sàátà	-lwàálá	-lwáálà	-lwàálá
902	illness, (crippling)	βòsàátú	òlwiílé	ùlwiílé	βòlwĭílé
275	imitate	-ìlémbékéjà	-lòndèlèlà	lòòndèlà	ìgílízyà
16	in front of	mbèlè	kòómbèlè	βòtóngí	kòòmbèlè
353	in the middle of	hàgàtí	há kàtí	hàgàtí	hàkàtí
118	incite	-chòngànishà ?	-sòŋgèlèlà	-	-sòòŋgèlèlà
206	increase, make greater	-òòŋgèjà	òŋgézyà	òŋgézyà	-òòŋgèzyà
155	increase	-kwĭílâ	-	-βĭtíílà	-zìlíisyà ?
426	inheritance	ìsààlò		màsààlò	-
542	inside, in	mùgàtí	-	mùgàtí	mùkàtí, mùnyùúmbà
353a	inside, middle	hàgàtí	múgàtí	hàgàtí	hàkàtí
132	intestines	βòlà	wòlà	wòlà	-βòlà
389	intoxicated (get)	-kòlwá	-kòlwá	-kòlwá	-kòlwá
513	iron ore	màwè gá chóòmá	-	màwè gá còòmá	màwè
264	iron	chòòmá	chòómá	còòmá	syòòmá
710	island	-	-	kisíiwà	-
2	itch	-βàβá	-βàβá	-βàβá	-βàβá
460	jammed (become)	-hágá	-	-fyènyéénkèlà	-hàgámìlà
853	jaw (bone)	ìlàŋgâyò	-	izàkúlà / màzàkúlà	-
960	jealousy	-	ìβòβá	ìβòβà	ìβòβá

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
271	journey	lògèèndò	lògèèndò	lògèèndò	lògèèndò
606	judge (vt)	-	-	-làmùlà	-làmùlà
810	jump, leap	-idúúmòkà	-lòóká	-lóóká	-dòmùkà
477	kidney	mfigó	mfigó	mfigó	mfigó
218	kill	-βòlágâ	-wòlágà	-wòlágà	βòlágà
677	king	mùtèmí	-	m(ù)tèmí	mùtèmí
787	kite	lòβálà ?	lòβálà	lòβálà, nyàándà	-
347	knead	-kàándà, -βiliíŋgâ	-kàándá	-kàándà	-tòβà
348	knee	izwí	iyòŋgò	iyùŋgò	-
427	kneel	-sùkàámbâ	-sùkáámbà	-sùkámbà	-tòláámbà
607	knife	lòshó	kísyò	lósyò, ŋgòòβìlò	kèélé
402	knife, thin, curved, broad-bladed	lòshó	-	lósyò lwà wígòòndè	lòhwèèzyò
704	knot	ìgùúndó	ìgùúndó	ìlúndó	ifùúndó
626	know	-mànyà	-mànyà	-mànyà	-mànyà
178	lake	nyàánzà	-	nyànzà	nyàánzá
151	lame (be)	-sòómhìlá	-	-sùùntá	-sùúntá
511	lamp	chèèŋgè	kòlòβói ?	tálà	lòmòlè, tálà
99	land (dry)	nsí yàà bó	há ŋàà, há bò	ŋgòóká	nsí ŋgòmé/ndàámé
761	large, great, big *	-hànyá	-hányà	-hányà	-kòlò
94	laugh	-sèkà	-sèkà	-sèkà	-sèkà
792	lay over on one side	-làájâ	-	-ìníká	-ìinàmìkà
1000	lazy	-zòβú	òvilà	-zòβú	ìzòβé
699	leaf, blade of grass	iswà	màswà	ìdótò	ìtíintà, bwáási
1025	leaf (tree)	idòótò	idòótò	ìdótò	itíintà
911	leak, ooze out	twiínà	-zwà	-sòlólà	-vwà
96	lean, bend down, slope	-ìinàmà	-ìnámà	-ìnàmà	-kòòŋkòmà
536	lean on, rely on	-ìsányà	-tègémèlà?	-ìliíŋgíílà	-tègémèlà ?

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
796	lean, become; grow thin	-gàándà	-gàándà	-gàándà	-kòòndá, -gàándà
535	leaning (be)	-ìinàmà ?	-	-èèlàmà	-sègámìlà
613	learn	-ìilàáŋgâ	-	-ìhémbékà	-ìfúndíìsyà
546	leave, permission	-zùnìtìjà	-	-lóómbà	lòhúsà
1011	leave over	-sàájà	-síígáázyà	-sìigàzyà	-lèkèlà
547	leave, go away	-ìtìŋgà	-wòókà	-wóókà	-βòókà
544	leave (off)	-lèkà	-lèkà	-lèkà	-lèkà
975	left over, (be); remain over	-shìigálà	-síígáálìlà	-sìigálà	-sìigázyà
310	leg, foot	kògòlò	m(ù)gòlò	múgòlò, mìgòlò	kògòlò/màgòlò
774	lend, borrow	-àázímá, làándà	-	-làndà	-àázímà ?
107	leopard	nsòβí	nsòβí	nsòβí	nsòβí
878	lick (vt)	-làámbá	-làámbá	-làámbá	-làámbá
134	lie down	-làálâ	-làálà	-làálà	-làálà
250	lie on one's back	-sàgààlààlà	-	-làálá kànsàgà	làálà kànságà
791	lift up, pick up	-ìnòòlà	-wòósyà	-ìnólá	-nyànyòòlà ?
467	light in weight	mbòòhú	mbòóhú	mbòòhú	ìbòòhé
304	light, sky	ilùùndè	ilùùndè	ilùùndè	ilùùndè
805	lightning	lòlábyà	-	ŋkàβá	lòkúβá/ŋkàβá
657	lime, whitewash	nswàákálá	nswàákálá	nswàkálá	nswàákálá
213	line, row	βòòlááŋgé	-	mùhílìlì	mùsìtáálì ?
659	line, fishing	-	-	làgòyè	-
103	lion	nshìímbá	nsìímbá	nywéélé	nsìímbá
198	lip	mùlòmò	múlòmò	mùlòmò	mùlòmò/mìlòmò
956	listen	-dègélékà	-dègélèkà	-dègélèkà	-hùlìkìzyà
972	listless (be)	-nògólékà	-	-nyèkà	-tàlàlà
1024	liver	ìtèmá/ìtìmá	ìtìmá	ìtìmá	ìtìmá
429	livestock (keep)	-sàβà	-sàβà	-sàβà	-sàβà

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
819	lobster	-	-	-	-
794	locust	màyigè	nzìgè	nzìgè	nzìgè
155a	long (become)	-lìihà	-lìihà	-lìihà	-tàìɪ̀ɪ̀mpà
144	long	liihú	ndìihú	-liihú	ntàlí
131	look after, care for	-ààŋgà	-tùúŋgyá	-lèlà, -túúnzyá	-tùúnzyá
871	look after grazing cattle, help a sick man on the road	-dɪ̀ɪ̀mà	-dɪ̀ɪ̀mà	-dɪ̀ɪ̀mà	-diimà
354	look at, examine	-lòlà	-liíŋgá	-liŋgá	-liíŋgá
354a	look around	-lòlààlòlà	-gàlòkà	-liŋgáliŋgà	-liíŋgáliíŋgà
200	look for, hang around (to get something), pursue	-ìgóóβìlìjà	-kòòβà	-kùŋkúsyà	-
973	loose (be); faint, weak	-nògólèkà	-lègèà ?	-nògólèkà	-nògólèkà
181	lost, get	-zimíílà	-tààgíkà	-tààgìkà	-tàágìkà
1023	louse	ìdá/ndá	mpànì	mpàni	ìdá/màdá
769	love, want	-tògwá	-tògwá	-tògwá	-sììmà, tògwá
934	lung	màbòòpò	-	màpópò	ìpòòpò/màpòòpò
713	magic *	βòlògì	òlòzì	ùlògì	βòlògì
714	maize	mùdégè	m(ù)dégè	m(ù)dégè	mùhííndì
521	make offerings to the dead	-isèéŋgá	-sàβílà	-isέŋgá	-ìsèéŋgá
226	male	ìgòóshà	-gòóshà	ìgóósyà	m(ù)gòósyà
10	mamba, green (kind of poisonous snake)	kipílì ?	ŋhòβókó	nyàlùdóótò	ŋkòβɔ̃kó
793	many	-iŋgí	nyìngí	nyìiŋgí	nyìŋgí
1019	many *	-iŋgí	nyìngí	nyìiŋgí	nyìŋgí
897	marriage	wiitòózî	-	witóòzi, kwitóólà	kwitóólà
895	marry (of man)	-tòólâ	-tòólà	-tóólà	-tóólà

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
896	marry (give in marriage-of parents, priests)	-tòójâ	-tòózyà	-ítóózyà	-tóózyà
814	master	mùtèmi	-	-	ßàáßà/màáyò múgì
888	match, harmonise (vi)	-lèŋgànìlà	-gèlànìlà	-gèlánà	-lìŋgànìlà
935	mature	-hànyá	-kòmèélà	-kòmèélà	-kòmèélé
596	meat	nyàmà	nyàmà	nyàmà, kànyúúŋgò kòòmù	nyàmà
259	medicine, remedy	ßògòtá	wògàáŋgà	ògáŋgà	ßògàáŋgà
260	medicine (art of medicine man)	ßòlàgòzì	wògàáŋgà	òlàgòzì	ßòfùmú
261	medicine-man	mùfùmú	mùgàáŋgà, mfùmú	m(ù)làgòzì, m(ù)fùmú	mùfùmú
90	meet	-sàánjà	-sáŋgyà	-sàáŋgà, -sàáŋgyà	-sàáŋgà
861	melt	-àáßà, -nánà	-àáßà	-yèyùkà	-zàgà
845	midwife	mùkóóŋgà	-	mwíŋgì	-
859	migrate, move away	-sàámà	-sàámà	-sàámà	-sàámà
1030	milk (n)	màßèélê	màßèélè	màßéélè	màßéélè
20	milk (curdled), curds	màßèélè gà ßògàándê ?	mbóßòtò	mbóßòtò	-
19	milk, (fresh) (n)	màßèélê	màßèélè	màsyósyò	màßéélè
903	millet (bullrush)	ßòßèlé	òsìgá	òsìgá	ßòßèlé
290	millipede	ìgóŋgólò	ìgòóŋgòlò	ìgòóŋgóló	ìgòóŋgòlò
73	mix (ingredients, 'season food')	-	-lòòŋgà	-kàlíŋgìzyà	-twìílà
72	mix, put together	-sáŋgìlìjà	-sáŋgànìà	-sàáŋgànìà, -sàáŋgyà	-sàáŋgyà
363	monkey (small lightish-coloured)	nhòómbílí	ntòómbílí	ntòmbílí, kànyàmùlilò	ntòómbílí

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
362	monkey (colobus- (with long black silk hair, white on shoulders)	-	-	-	-
361	monkey (small, dark-coloured)	ŋgòkò	ntòómbílí	ŋgùkù	ŋkòkò
716	moon	ŋwèèzí	mwèèzi	mwèèzí	mwèèzí
609	moonlight	ŋwèèzí	mwèèzí	mwáŋgà gwá mwèèzi	mwèèzi
59	mosquito	ìbó/mbó	lòbó	mbù	mbó
436	mother	yàáyò	màáyò	màáyò	màáyó
65	mould (pottery)	-βòómbá	òómbá	-βóómbá	-βòómbá
717	mountain	lògòlò	lògòlò	-lògòlò	lògòlò
163	mouming	kìlílò	kìlílò	kìlílò	silílò
1026	mouth	mùlòmò	mùlòmò	m(ù)lòmò	mùlòmò
272	movement	lùgèèndò	lùgèèndò	lùgèèndò	lùgèèndò
979	mud, mire	màlòlò	màtòpè ?	màlòlò	màlòlò
642	mushroom	βòòβà	wóβà	wòòβà	βòòβà
152	mutilated (be)	-lèmàálâ	-lèmàálà	-lèmàálà	-lèmáálà
281	name	liìná	liìná	liìná	liìná
539	namely	hó kùyòòmbà	-	fívi	nòkówfífílá
403	nape (of neck)	nhàgálàlò	-	ùkósì	βòkòsì
256	navel	ìnòkú	ìnòóŋkú	ìkòómbó	ìkòóndó
765	near	bìihí	bìihí	bìihí	biihí
379	neck	nhìiŋgó	hìiŋgó	hííŋgó	ìkòsì
843	need, request	ŋhòómbó	-	kíkòòβà	hàájà ?
962	new	-pyá, -gèni	mpyá	m(ù)pyà	-pyà
718	night	βòzíkó	ùzíkó	βòzikó	βòfùkú
755	nine	kèèndá	kèèndá	kèèndá	kèèndá
484	nose	nìíndó	nyííndó	nìíndó	nyìíndó

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
211	number	nàámbà ?	-	mbàzyò, nàámbà	m(ù)làámbá
237	oar	ndĭínhó	-	m(ù)tííŋkó	m(ù)tiíŋkó
939	obstruct	-kĭíŋgá	-kàánà ?	-kĭíŋgá	-kàánà
48	offspring	βàànà, βòβyàálwá	mwàànà/βàànà	mwàánà, mùβùtó	lòβùtó
66	oil (from plants)	màgùtá	màfùtá	màgútá	màfùtá gá βótò
435	oil	màgùtá	màfùtá	màgútá	màfùtá
818	old times, the past	kàlè	kàlè	kàlè	nsìkó, kàlè
411	old person	m(ù)nàámhàlá/m(ù)gìíkól ó	m(ù)gíkólò	mùnàmàlá, mùkikúlù	m(ù)kiikólò
410	old	-kòlókólò	-à kálè	ìkùùkùù, lyàkálé	-kòókóò
214	one-eyed (being)	sòóŋgó	nsòóŋgó	sòóŋgó	-
440	one	lómò	yímò	yímò, sòòló	iímò
590	open mouth wide	ààsámâ	-àsámà	-ààsámà	-ààsámà
984	open	-lùgòlà, -tùúŋgólâ	-lúgòlà	-lùgòlà	-kìŋgòlà
829	open (set ajar) a door	-sàánsámíkà	-kìŋgólà	-lùgòlà hàdóó	-siíndíkà
876	order, direct	-tòmá	-làgìlìzyà	-làgìlìzyà	-làgiìizyà
961	ostrich	ìnòóŋgú	-	nòóŋgú	-
640	our(s) pl. 1st person)	yìíswè	yíiswè	yíswè	sĭítú
506	out (go), go away	ìtĭŋgà	-fùmá	-fùmá	-fùmá
324	outside	hàànzé	híí bàálà	kwìibàálà	hàànzé
217	overcome; win, vanquish	-kiíndá	-kííndá	-kííndá	-kìíndá, -siíndá
995	owed by, be	-tòóndwá	-	-tóóndá, tóóndwá	-tòóndá
835	oyster	-	-	-	-
207	pack (luggage)	-tùúŋgá hámò	-tùúŋgà	-tùùŋgáánìà	-tùúŋgá
208	pack, press together	-	-	-kìíndĭlà	-sòmèkèlèlà
456	pack, flock, group	ìdàálé	-ilòndò	ìdàálé/màdàálé	ìdàálé
457	pack, bale, bundle (n)	-	ìtòómbá	ifùlùùsyì	-
236	paddle (n) *	ndĭínhó	-	mùtííŋkó	m(ù)tiíŋkó

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
342	palate	ìlàáŋgó	-	ìlàŋkó	ìlààŋgò
9	palm (date)	mùtèéndé	mùtèéndé	mùténdé	-
719	palm-wine	wààlwá	-	wààlwá	-
257	palm (of hand)	kògàànzà	kìgàànzà	-	igàànzà/màgàànzà
6	palm (raphia)	-	-	mùhàmà	m(ù)sùnúnú
7	palm (borassus)	mùhàmà	mùhàmà	-	mùhàmà
8	palm (oil)	màwésè ?	m(ù)chìkíchì ?	mùßésé	m(ù)chìkíchì
459	palpitate, flutter, tremble	-dètèmà	-	-tètèmà	-tètèmà
47	parent, s/he who begets	mùßyĭfyé	mùòtí	mùßyáázì	mùßùtí
720	parrot	kàsùkù ?	kàsúkù ?	kàsúkù	kàsúkù
232	pass, surpass	-ßìtá	-ßìtá	-ßìtá	-ßìtà
325	path	nzìlà	nzìlà	nzìlà	nzìlà
159	pay	-lìpà	-lìpà	-lĭpà, -sòßyá	-lĭpà
600	pay attention, take care	-lòlà	-lìŋgílílà	-liìŋgá	-lĭŋgá
820	peel, shell	-tòóndólâ	-pàátà	-pàátà	-pàátà
12	peg	ìdòlólò/màdòlólò	-	mbàgò	-
11	pegs (tent)	màámbó, màkòmélò	màámbó	lòmàámbò/ màámbò	lòmàámbò/màámbò
494	penetrate	-ßìtá	-	-ìfyéényéŋkèzyà	-dòlà
721	penis	mbòló	ìßòló	ilògà	mbòló
884	penknife, lancet	ìgèèmbè	kàgèèmbè	kàgèèmbè	kàgèèmbè
558	person	mùùnhò	mòòntò	mùùntò	mùùntú
638	pestle	ŋwìishì	mùkòòŋkó	m(ù)kòòŋkó	mwĭĭnsĭ
312	pig	ŋgùlùßè	ŋgùlùßè	ŋgùlùßè	ŋgùlùßè
414	pigeon, kind of	hùúndà, ŋhùúndâ	ŋkùùndà	ŋkúndà	ŋkùúndyà
579	pile up, pile loads on head	-idwĭíkâ	-lòndìkà	-lòndìkà	-lòndìkà

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
479	pinch, make narrow	-shìnà	-sìnà	-sìnà	-sìnà
357	pipe (tobacco)	ntèèmbà ?	mùtèèmbà	m(ù)tèèmbà	mùtèèmbà
552	pit, hole	lìínhà	lìínà	lìínà, ìkólòòŋgwà	lìínà
974	place, put (vt)	-dìtílâ	-ìŋgìzyà	-tòólà	-tìtílà, -tòólà
722	place (n)	hàànhò	hánó	hàántò, hákìmbàtì	hàntò
892	place of the dead	kòŋhàlíkílò	-	kò βàfú	kòzimú
225	plait	-sùkà	-sùkà ?	-sìβà	-sùkà
932	plant, sow	-hààmbà	-hààmbà	-hààmbà	-téélà
510	platform	lòtàlá	lòtàlá	lòtàlá, lòtáàlè	lòtàlá, lòtàántá
834	please, satisfy (vt)	-igótyà	-kòlòélà	-tósyà	-nòzyá
93	pleased (be)	-tògíshíwà	-tògíízìwà	-tógézìwà	-nòzyá
13	plot of ground	lòβóógâ	kìwànjà ?	séésà	lòβáánzá
647	plunder (a town)	-	-	-	-
1014	plunge into, cause to sink	-pònèjà	-tmbòkìzyà	-táágílà	-dùmbúkìzyà
114	poke	-sòòsèlà	-pèmbélèzyà	-pèèmbélà	-pèémbélèzyà
737	pole, thin	lògitò	lògitò	-lògitó	lògitò/ŋgitò
111	polish, clean by rubbing	-nèlèjà	-	-gùùsà	-kùùsà
177	pool, pond	ìlàámbó	ìlàámbó	kàláámbó	kàtàβà, ìlàámbó
923	porcupine	nòòŋgòlì	-	nòòŋgòlì	nòòŋgòlì
374	porridge (stiff)	βògàlì	ùgàlì	ógálì	βògàlì
42	pot (metal)	ikòópô	ìkópò	ìkópò	ìkópò
41	pot, vessel	kìsèmè	kìsèmè	kìsèmè	sìsèmè/vìsèmè
39	pot, mug	mùkèébé	m(ù)kébè	mùkébè	mùkébè
40	pot, cooking (earthen)	nùùŋgò	nyùùŋgò	nyúúŋgò	nùúŋgò
749	potato (sweet)	kàfù	kàfù	kàfù	kàfù
646	potter's kiln	ìtànúlù ?	-	ìtìmìlò	ìtìmìlò

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
369	pound (grain in a mortar to get off the husks)	-pòólâ	-pòólà	-póólà	-twàáŋgá
441	pour away	-ìitá	-ìitá	-ìitá	-sèèsà
641	pour	-dìtílâ	-	-kènénà	-fùùkà, tìtílà
748	pregnancy	ndà	ndà	mwìitúúŋgò	ndà
636	pregnant, be	-kòβi ná ndâ	-βà ná ndà	-kòβá ná mwìitúúŋgó, ndà	-βà nà mwìitúúŋgó
599	prepare	-βèégélèjà	-βégélèzyà	-kwìiβááŋgà	-nògélézyà
553	press out (oil seed, sugar cane)	-gòòŋgà	-sìndíkà	-gòòŋgà	-sìíndíkà
986	produce, put forth, display	-fùmyá	-fùmyá	-fùmyá	-fùmyà
909	prominent (be); put out	-fùmílíjà	-fùmá	-fùmìŋkànà	-fùmá
518	pronounce	-yòòmbà	-	-yòòmbà	-yòòmbà
340	protect by charm (medicine)	-kàgá	-kàgá	-kàgá	-kàgá
947	protect by charms (target)	-kàgá	-kàgá	-kàgá	-kàgá
475	puff-adder	ìmàmbàhìlí	kìpílì	kìpílì	kìpílì
244	pull	-lùtà	-kwèèsà	-kwèèsà	-kwèèsà
173	pull up, come to a halt	-ìímá	-ìímá	-ìímá	-ìímá
172	pull up, root up	-dùbòlà	-dùbòlà	-dùbòlà	-dùbòlà
833	pull, drag	-gògótâ	-kòkótà ?	-kwèèsà	-kwèèsà
57	pump	iβóómbà	iβómbà	iβóómbà	iβóómbà
548	push	-shiindíkâ	-siindíkà	-tèŋkà	-sìíndíkà
992	put, place, set	-tòólâ	-tòólà	-tòólà	-tòólà
887	put together for comparison	-lèŋgànìjà	-lííŋgá	-líŋgànìzyà, -gèlànìzyà	-líŋgànìzyà
969	put a pot on the fire	-tèéŋgá	-tòólà	-èléká	-tèéŋgá

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
981	put together, compose	-βèéjâ	-tùúŋgá	-tùúŋgá	-lííŋgá
862	python	ìsàtó	sàtó	nsàtò	nsàtó
656	quarrel (vi)	-iyílwá	-ikéníà	-ikéníá	-sòòlà
180	quench, extinguish	-zìmyá	-zìmyá	-zìmyá	-zìmyà
485	quiet (be)	-pòlà	-	-lèèmbèèlà	-lèèmbèèlà
76	rain	mbùlá	mvùlá	mbùlá	mvùlá
917	rain (vi)	-tùlá	-tòónyà mvùlá	-tòónyà mbùlà	-gùmà mvùlà
1006	rains, the lesser	ŋwàànúlí	-	mwànúlí	kàmwànúlí
197	rainy season	kìdìkú	kìdìkó	kìdìkó	sipwá, sìdìkó
580	rumble	-dùdùmòkà	-	-líìndímà	-lùlùmà
26	rat, kind of	ŋgòsò	-	ndèzí	kòswà ?
488	rat (field)	ìfùkò/mfùkò	---	nsèènzì	ŋkòsò
24	rat	ŋgòsò	ŋkòsò	ŋkòsó	ŋkòsó
25	rat- (very large, long-tailed)	ŋgòsò	mfùkò	mfùkò	-
883	razor	lògèèmbè	lògèèmbè	lògèèmbè	lògèèmbè
949	read	-sòmà	-sòmà	-sòmà	-sòmà
1007	reap, harvest	ìtmbùlà	-ìmbùlà	-ìmbùlà, -pùtá, -tònà	-ìmbùlà
523	receive	-bòkèèlà	-pòkèèlà	-pòkèèlá	-pòkèèlà
537	reed	màdètè	màdètè	màkúúmbò	màtètè
632	refuse, say no	-lèmà	-kàánà	-kàánà	-kàánà
633	reject, refuse, dislike	-lèmà	-kàánà	-kàánà	-kàánà
545	remain, stay behind *	-shìigâ	-síígà	-síígá	-ikàlà
1035	remain, stay	-shìigálà	-síígà	-síígálà	-ikàlà
840	remember	-ìzòkìlà	-izókìlà	-izókìlà	-izòkìlà
499	resemble *	-ìikólá	-ìkólá	-ìikólà	-ìkólá
879	resemble (very closely)	-ìikólá	-ìkòlà	-ìikólà	-ìkólá

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
1031	resemble *	ìikólá	-ikólá	-ìikólà	-ikólá
149	rest heavily on, be burdensome	-lèmèèlà	-	-zòßèlwà	-tìmbìlwà
964	rest the cheek on the hand (in brooding mood)	-ìidíímàá ìtàmá	-isúmátà	-ìdíímá ìtàmá	-idíímà ìtàmá
957	rest, take a holiday	-ìsúúhyá	-sùùhà	-sùùhà	-itóózyâ
249	return, go back	-ìizà	-sùßà	-sùßá	-sòßá
1004	return	-shòòkà	-sùßá	-sùßá	-sòßá
500	revive	-pèmbóólâ	-	-tèèmbòòcà	-fùfùùlà
318	rhinoceros	mhèlá	mpèmbélé	mpèlá	-
988	rib	lòßàzù	lòßàzù	lòßàzù	lòßàvù/mbàvú
473	ripe	lyà ßópyè	-piílé	lyà ßópyè	ìpiílé, ßòpyé
996	ripen (vi) *	-pyá	-pyá	-pyá	-pyá
472	ripen (vi)	-pyá	-pyá	-pyá	-pyá
209	river	mòóŋgò	mòòŋgó	mòòŋgó	mòòŋgó
239	roar, rumble	-hìlá	-	-ßìndìmà	-tùlùmìlà
644	roast	-òòchà	-	-kàlííŋgá, -bàníkà	-bàníkà ?
350	roast (in/by fire)	-twììmà	-bàníkà ?	-tìímà, -òócà	-tìmà, -ßàßóólà
806	rock	iwè	ìtàlé	ìtàlé	ìtàlé
291	rooster (cock)	ikùúŋgúlúmé	-kùŋgùlùmè	ikúŋgúlúmé, hùŋgúlúmé	ŋkùŋgùlùmé
169	root	mùzi	m(ù)zì	m(ù)zì	mùzi
29	rotten	ißí, -ßólé	mbí	ißí, -kènàgókílé	ßòßólé
1012	round (be)	-ìgónzéélà	-	-filíŋgànà	-ßìlííŋgâ
183	round (go), turn round	-ìgóónzá	-ziíŋgá	-ìpílíŋgà	-zííŋgá
999	round, become	-ßìlìŋgâ	-ßìlììŋgà	-ßìlíŋgà	-ìpílímyà
110	rub	-kùlà	-	-kúlùùzyà	-sògólà
50a	rubbish, garbage	ßòchàfâ ?	-	màtàkàlà	màtàkàlà

No	English	KìDàkámà	KìNyányèèmbè	KìKónòòŋgò	SiGàlàgáànzà
321	rubbish heap	ìshímò ?	-	lùwùgúlú	ìzyáálà
826	run	-pèèlà	-pèèlà	-pèèlà	-ilòkà
522	sacrifice	màtòmólò	-	kàlòmbìlò	-
723	salt	mùùnú	mùùnyú	mùùnyú	mòònyó
95	sand	m(ù)sèèŋgélà	mùsèŋgàsèŋgà	m(ù)sèŋgásèŋgà	mùsèèŋgà
630	satiated (be); have enough to eat or drink	-ìgótà	-ìkótà	-ìkótà	-ikótà
788	satisfy	-fùjà	-	-	-nòzyá
251	say to, tell to	-wíílâ	-wíílà	-wíílà	-βwíílà
783	scorpion	ìkómí	kàmìínà	kàmínà	kàmíínà
453	scrape	-kwàáŋgólâ	-kwàáŋgólà	-pàlà	-pàláŋgòzyà
855	scrape, grate	-pàlàlà	-kwàáŋgólà	-kwááŋgólà	-kwàáŋgólâ
856	scratch, grate *	-ishínágòlà	-sìnàágòlà	-kwàánà	-sìnàágòlà
668	scythe, sickle	ìmòòjò	ìmòòzyò	ìmòòzyò	ìhwèèzyò
84	search for	-kòòβà	-kòòβà	-kòòβàkòòβà	-kòòβà
85	search diligently	-pàlààpàlà	-pèsòlà	-kùlà	-pèsà
738	seat, stool, chair	ìsùúmbí	ìsùúmbí	ìsùúmbí	ìfùúmbí
770	see	-βòná	-wòná	-wòná, -liiŋgá	-βòná
67	seed	ìòβìyó	mbìyó	mbìyó	mbùtó
404	seize	-dìímâ	-dìímà	-dìímà	-dìímà
611	self	nyèníkílí	-ènìkílí	mwènìkílí	m(ù)sàβà ?
302	sell	-gòjà	-gòzyà	-gòzyà	-gòzyà
570	send	-tòmá	-làgìlìzyà	-tòmílìzyà	-tòmá
451	separate, set apart	-tèéŋgá	-bàágòlà	-tóólá héékè héékè	-gàβòlà
450	separate, leave each other	-lèkàánà	-lèkàánà	-lèkàánà	-lèkàánà
534	set a trap	-tègá	-tègá	-tègá	-tègà
868	set (of the sun)	-lòká	lyòòβà kógwà	-lòká	-zyàámà

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
971	settled (be); be in good order	-lèèmbèèlà	-βégélèzyà	-gèlànìlà	-liŋgànìlà
754	seven	mpùúŋgàtɨ̀	mpùúŋgàtí	mpùŋgàtɨ̀	mpùúŋgàtí
1033	sew *	-sùmá	-sùmá	-sùmá	-sùmá
589	sew	-sùmá	-sùmá	-sùmá	-sùmá
135	sexual intercourse with (have)	-ìtòómbâ	-ìyáánzà	-yàànzànà, ìlàálà, -tòòmbà	-ìtòómbà
691	shadow, shade	chìnìíni	kɨ̀nzɨ̀mínzɨ̀mí	m(ù)tàkà	m(ù)tàkà, kìnzèmé (hùmàn)
867	shame, disgrace	nsòní	nsòní	nsòní	nsòní
116	shame	nsòní	nsòní	nsòní	nsòní
724	shame, modesty	nsòní	nsòní	nsòní	nsòní
386	sharp (be)	-òògíhà	ògíhà, -gùmà lɨ́ ŋgòólyó	-òògíhà	-tyàálà
920	sharpen	-nòòlà	-nòòlà	-nòòlà	-nòòlà
915	shave	-mòògà, -sɔ̀ɔ́nzɔ́ɔ́lâ	-sèénya	-séénya, -mòògà	-mòògà, -sɔ̀nzɔ́ɔ́là
603	she, he	wèéí	mwènɨ́kílí	mwènɨ́kílí	àáwé
287	sheep	hòlò, ŋhòlò	ŋkòlò	ŋhòlò	ntàámà
1009	shell, cowrie	nshìimbí	-	kòmbélélé	nsìimbí
822	shell	nshìimbí	tòkòmbélélé	kòmbélélé	-
725	shield	ŋkɨ̀ɨ́ŋgà, lòŋòòdà	-	lòkɔ́ɔ́ŋgà	-
712	shin (bone)	m(ù)lòɔ́ndí	mùlòɔ́ndí	m(ù)lɔ́ndí	mùlòɔ́ndí
968	shiver, shudder *	-dètèmà	-tètèmà	-tètèmà	-tètèmà
528	shiver	-dètèmà	-tètèmà	-tètèmà	-tètèmà
434	short	ŋgùhí	ŋgùhí	ŋgùhí	sifùpí, -gùhí
430	shoulder, tip of	igòɔ́ndí	íβègà	nsòtó yà màβègà	iβègà
588	shoulder	iβègà	íβègà/màβègà	iβègà/màβègà	iβègà
839	shout	-yògá	ùβìtí ?	-tùlà ìbòòbó	-yògá
946	shrivelled (be); wrinkled	-ikúná	-	-kàákànyàlà	ikòónjá

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
763	sick	-sàátú	ndwíílé	m(ù)lwiílé	m(ù)lwìílé
870	sift	-chèká, -yòòŋgà	-yòòŋgà	-yòòŋgà	-yòòŋgà
615	sing	ìǐmbá	-ǐǐmbá	-ǐmbà	-ǐǐmbá
3	singe	-βàβá, -biíshâ	-βàβá, -zùzùúlà	-βàβá	-βàβóólà
980	sink, be drowned	-twìínâ	-lòβà	-dùmbúkìlà	-tàlàlà
170	sink	-liβílà	-zyàámà	-zyàámà	-zyàámà
726	sister (his)/ (her) brother	kàlòòmbò	ìlòmbò	ìlòmbò	ilòmbó
627	sit	-ìikàlà	-ìkàlà	-ìkálà	-ìikàlà
753	six	mùkàágá	mùkàágá	mùkáágà, hàágá	mùkàágá
785	size, measure	kìgèmò, nshìmó	m(ù)kìmó	βòhányà	sìǐmó
123	skin (of person)	ndìlǐ, ndìlǐí	ndìlí	ndìlí	ndìlí
124	skin/rind (of fruit)	igólà	ìpàlàlà	ìkùùmbà	ìtàkàlà
303	sky	ilùùndè	ilùùndè	ilùùndè	ilùùndè
865	slander, accuse falsely, often secretly	-lèémbékèjà	-sòŋgèlèlà	-sòòŋgèèlà	-sòòŋgèlèlà
470	slap	-tòlá ípì	-làátòlà ìkòófì	-tòlá ìpí	-gùmà ìkóófì
970	slash	-tèmá	-	-pùtá	-tèmá
220	slaughter	-sìínzá	-sìínzá	-siínzà	-sìínzá
727	slave, bond servant	m(ù)sèsè	m(ù)sèsè	m(ù)zyà, m(ù)sèsè	mtòmwà ?
728	slave (female)	m(ù)sèsè	m(ù)sèsè	m(ù)zyà	-
729	slave, (male)	m(ù)sèsè	m(ù)sèsè	m(ù)zyà	-
136	sleep (vi)	-làálâ, -tìíndílâ	-làálà tòló	-làálà	-làálà
731	sleep (n)	tòló	tòló	tòló	tòló
730	sleeping-place, accommodation	hà kòlàálâ	há ùlàálò	ndàálò	hà βòàálò
967	slip, be slippery	-nyèèlèlèkà, -nyòòlòlòkà	-tyèèlèmùkà	-tyèèlèmùkà	-tyèèlèmùúŋkà
1021	small	ndó	ndó	ndò	sidó
332	smallpox	ndòbí	ndòβí	káálèèmbè	ndòví

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
241	smell (sweet) (vi)	-mòòtà	-nùŋkɨlɨlà	-mòòtèèlà	-nùŋkɨlɨlà
242	smell (bad, of fish) (n)	isʊ̀ʊ́, ìnùùβó	-nùùŋkà	ʊ̀nùùŋhú	kʊ̀nùùŋkà
240	smell (bad) (vi)	-nùùŋhà, -nùùhà	-nùùŋkà	-nùùhà	-nùùŋkà
629	smoke (n)	lyòòchí	lyòŋkí	lyòkí	lyòònsí
428	smoke (give out) (vi)	-zùùkà	-zùùkà	-zùùkà	-tùùŋkà
387	snail, slug	ŋgòòfú	-	ŋkòlófù	mfwèèlò
837	snail	ŋgòòfú	-	ŋkòlófù	mfwèèlò
145	snake, serpent	nzòká	nzòká	nzòká	nzòká
158	snare, trap (n)	ìβɨɨndò, m(ù)tègô	mʊ̀ʊ̀pá	m(ù)tègó	mùtègó
864	sneeze	-ityáámùlà	-tyàámùlà	-ityàámúlà	-ityáámùlà
924	sniff, smell out	-nùùnyhà	-nùùnsyà	-nùùhyà	-nùùnsyà
296	snore, snort	-kòlòmà	-kòlòmà	-kòlòmà	-kòlòmà
69	soil	βʊ̀lòóŋgò	ʊ̀lóóŋgò	ʊ̀lóóŋgò	βʊ̀lóóŋgò
732	song	lyɨɨmbó/mɨɨmbó	lwɨ̀ɨmbó	lwɨ̀ɨmbó/ nyɨɨmbó	lwɨ̀ɨmbó
616	songs *	mɨɨmbó	nyɨɨmbó	lwɨ̀ɨmbó	nyɨɨmbó
36	soot	màkìlí	màkìlí	màkìlí	màkìlí
195	sorcerer	mùlʊ̀gì	m(ù)lòzì	m(ù)lʊ̀gì, m(ù)kònìkònì	mùlòzì
201	sore	ìlòòndà	ìlòòndà	kìlòòndà	kìlòòndà
734	soul, spirit	ŋhòlʊ́, hòlʊ́	mʊ̀ʊ̀yʊ̀, ŋkòlʊ́	hòlʊ́	mʊ̀ʊ̀yʊ̀
331	sound, cry	m(ù)zwí	kʊ̀lɨlà	m(ù)zwì	mùzwí
64	space (open)	hàápé	ʊ̀wánjà ?, lwìigó	lʊ̀wʊ́ŋgà	lʊ̀ßʊ́ʊ́hà
82	spark	màsàsí	sàsé	nsèsé	nsèsé
253	speak	-yòòmbà	-yòòmbà	-yòòmbà	-yòòmbà
733	spear (n)	ìchìmú	ikìmú	ìtìmú	ìsùmú
137	spend time	-tʊ̀mɨlá màkàánzá ?	-sʊ̀nsʊ́mʊ̀là	-sʊ́sʊ́mʊ̀là	-sʊ̀ʊ́nsʊ̀mʊ̀là
1038	sperm, semen	wìinê	-	wíiné	βʊ̀tʊ̀kʊ̀
62	spider	lʊ̀βʊ̀βì	kàβʊ̀ʊ̀βì	itántàβì	lʊ̀ßʊ̀ʊ̀βì
182	spirit (of dead person)	mùzìmú	mùzìmú	mùzìmú	mùzìmú

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
464	spirit (disembodied)	mùzìmú	mùzìmú	mùzìmú	mùzìmú
683	spirit (evil)	mùzìmú	mùzìmú	mùzìmú	mùzìmú
582	spit	-tùùgâ	-tùúgà	-tùùgà màtyé	-tùùgà
533	spittle	màté	màtyé	màtyé	màté
601	split, crack (vt)	-tàándòlà	-tàándòlà	-tàándòlà, -nèná	-tàándòlà
951	spoil, blind (vt)	-hòfúshà	-pòfùzyà	-hòfùsyà	-pòfùlà
649	spoil (a child)	-lègélà	-sènèkà	-sènèkà	-nyènyèkà
998	spoil	-βìípyâ	-βìípyà	-βìipyà	-βìipyà
813	spoon	mùdìínhó	m(ù)tìíŋkó	m(ù)tìíŋkò	mùtìíŋkó
5	spot, speckle	ibàdó, ìdòlé,	iβàlá/màβàlá	iβàlá, ibàdó	iβàlá
959a	sprain an ankle	-tègùkâ	-tègólòlà	-tègólà	-tyèègòkà
141	spread out (be)	-èènélâ ?	-sàámbázyà	-sàámbáálà	-sàámbáálâ
527	spread	-àànzà	-àànzà	-àànzà	-àànzà
908	spread abroad, be; become generally known	-kùmòókâ, -èènélâ ?	-mànyìkà	-mànyìikà	-mànyìilà
592	spread, smear on	-βìlá	-βìlá	-βìlá	-ìsíígà
591	spread, scatter (vi)	-sàámbáálâ	-sàámbálà	-sàámbáálà	-sàámbáálâ
880	spring (of water)	nzwìilò	mòòŋgó	kàsélà	-
965	spring, machine	mùtàámbó	-	mùtàámbó	mùtàámbó
866	spy out	-βòógílìjà	-pèlélèzyà ?	-βóólìzyà	-pèlélèzyà
849	squat (on the haunches)	-ìtòóndá	-sòónzóβàlà	-sónzóβàlà	-sòóŋkómàlà
991	squeeze oneself up against a wall (e.g. to allow another to pass)	-ìsómá	-pènyèzyà ?	-ìhégà	-ìísyáánà
914	squeeze out	-kàándá	-mìnyá	-kàmá	-kàmóólà
343	squeeze, milk	-shèémâ	-syèémá	-kàmá, -syèémà	-kàmá
102	squirrel	-	líŋkàlà	kàwùùndi	-

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
562	stack, pile up	-lòòndà	-lòndìkà	-lòndà	-tòòmbìkà
1029	stand (vi)	-ìǐmá	-ìǐmá	-ìǐmá	-ìǐmá
735	star	sòòndá	sòòndá	sòndá	nsòòndá
390	stare, glare	-βùùndòlà	-kònòlà mìnsó	-tòmòlá mìnsó	-tòmòlà miinsó
202	start off, send away	-ìǐnjà	-fùmyá	-ìǐnjà, -síímyà	-fùmyá
799	startle, catch unawares	-kàáŋgá, -kàáŋdá	-	-tìnókìlà	-sìtókìzyà ?
830	startle, jerk	-kàáŋdá	shìtókìzyà	-tìnókìlà	-sìtókìzyà ?
618	steal	-ìiβá	-ìiβá	-iiβá	-iiβá
266	steel	chòòmá	chòòmá	còòmá	-
554	stem (of maize, millet, etc.)	màβèlélé	iβòlólé/ màβòlólé	iβèlélé/màβèlélé	iβèlélé
825	step over	-kìlá	-dòmòkà	-ìdùùmòkà	-tàámbòkà
315	sterile man (or woman)	mùgòòmbà	mùgòòmbà	m(ù)gòòmbà	mùgòòmbà
541	stick	mùlàáŋgà	mùlàáŋgà	mùlááŋgà	mùlàáŋgà
74	stir, mix by stirring	-sàànjà	-kùlùgà	-sáŋgànìà	-sàànzyà
850	stir	-sàáŋgìlìjà	-kùlùgà	-kùlùgà	-sàànzyà
78	stir up	-	-	-wùmbòlà	-
61	stone	iwè	iwè/màwè	iwè	iβwè
228	store up, collect	-lòòndìkà	-kùsàányá ?	-kùmiiŋgà	-kùmiiŋgà
154	straight (make)	-gòlòòlà	-gòlòòlà	-gòlòòlà	-gòlòòlà
268	stranger, guest	mùgènì	mùgènì	mùgènì	mùgènì
661	stream, current	-	mòòŋgó	ŋkùlúlú	mòóŋgó
798	strength, power	ŋgùzù	ŋgùzù	ŋgùzù	nàgà
140	stretch oneself	-ìgólóólà	-ìgólòòlà	-ìgólòòlà	-ìgólóòlà
395	strike, knock	-gòŋóónéjà	-gòmìzyà, -tòlá	-gòòŋgà	-gòmá
982	strike with a spear	-chìmà, -làsá	-sòmà	-kìmà	-sòmà
282	string (n)	ùzì ?	ùzì ?	βùzì	úzì

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgáànzà
487	strip off (e.g. grains of corn)	-hòlòlà	-yàβà	-pòlòlà	-pùlùlà
519	strut proudly	-iikúmyá	-iβóná	-ikúmáálósyà	-ikúmyá
407	stumble	-igúúmhá	-kùúmpá	-ikúúmpá	-ikúúmpá
997	stunted (be); be spoilt	-tèéndéélâ	-dùmàálà	-	-dùmáálà
948	stutter	-ŋàŋánĭjà	-gùgùmìlà	-gúgùmìlà	-gùgùmìlà
594	suck (the breast)	-òòŋhá, -òòhá	òòŋká	-òòŋká	-òòŋká
480	suck (vt)	-miímâ	-òòŋká	-miímà	-miímâ
912	suffer, bear patiently	-iyòòmílĭjà	-vùmìlìlà ?	-iyómílízyà	-iìgúmílìzyà
802	sugar cane	ìgùβâ	ìgúβà	ìgúβà	ìgúβá
333	sun, light	ìtìmí	lyòòβá	lyòòβá	lyòòβá
184	surround	-iyóŋgóólà	-pilìmà	-pilìmà	-zyòŋgólòkà
438	swallow	-milà	-milà	-milà	-milà
777	swear	-làhìjà	-làhìlìzyà	-ilàhìlà	-làhìlà
905	sweat	lòòyílô	ìdòtá	lòòyílò	ìtòtá
392	sweep up, collect in a heap (rubbish)	-lòòndìkà	-zyòólà	-kùmiiŋgà	-kókómòlà
943	sweep	-pyàágólà	-pyàágólà	-pyáágólà	-pyàágólà
517	sweet, pleasant	-nònú	nsèèmú	-sèèmú	sìsèèmé
51	swell	-βiímbá	-βiímbá	-βiímbá	-βiímbá
608	sword (short)	lòshó	hálà	ŋgòòβílò	kísyò
933	sword	lòpáàŋgà	lòpáŋgà	lòpáàŋgà	lòpáàŋgà
360	tail	mùkìlá	mùkìlá	mùkìlá	mùsìlá
875	take leave of	-dààhyà	-dààhyà	-dààhyà	-dààhyà
778	take in (from rain, etc.)	-òòβá	-	-ikíŋgílízyà	-ilòkà mvùlà
565	take, carry	-sólà	-sòlà	-sòlà	-sòlà
233	take off (clothes), undress	-zúúlâ	-vùúlà	-zúúlà	-vùúlà

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
530	tangle	-tùŋgwá	-	léétá ùlààmbú	-pòmyá
898	taste (v)	-βòònjà	-lòzyà	-gèmà	-βòònzyà
985	teach, instruct	-hànà, -làànjà, -làáŋgà	-làáŋgà, -hèémbékà	-hèémbékà	-fùúndíísyâ
621	tears	mìisózì	ndìlílò	mìisózì	mìínsózì
412	ten	ìkòmí	ìkòmí	ìkòmí	ìkòmi
121	termite	mìswá	m(ù)swá	m(ù)swá	mùswá
739	testicle	ìdòòsò	ìtùúnyà	màtúúnyà	ìvyà/màvyà
1020	that	ìyò	fíyò	ìyò	ìyò
455	thatched roof	hàándì	ìβándà	kwígólyà	-
767	there	òkò	àhò, ùkò	áàhò, ùkò	àhò, òkò
54	they	βòòí	βèníkílí	àáwò	àβò
444	thick, fat	ìgìnú	ŋgìnú	ŋgìnù	-gìnú
86	thicket *	màsákâ	ìsákà	ìsákà	ìsòkòòlà
854	thicket	ìsákà	ìsákà	kàsákà	ìsòkòòlà
619	thief	ŋwìíβí	mwìβí	mwìíβí	mwìízí
23	thigh (of human)	ìtàáŋgó	ìtàáŋgó	ìtàáŋgó, màtàáŋgó	ìtàáŋgó
22	thigh (of animal)	kòtàámbò	ìtàáŋgó	ìtàáŋgó, màtàáŋgó	ìtàáŋgó
559	thing	kìínhò	kìntò	kíínú	síintò
987	think, imagine	ìgáníkà	-igánìkà	-igánìkà	-igánìkà
651	thirst	nòótâ	nyòótà	nyòótà	nyòótâ
740	thorn	lííŋhwà	lííŋhwà	lííhwà/míihwà	líígwá
689	threaten	-ògóhyâ	-kàáŋgá	-ògóhyà	-òògóhyà, -kàáŋgá
532	three	ìdátò	ìdàtò/yàátò	ìtátó, ìdátó	ìtátó
115	thrust into	-chìmà	-kìmà	-kìmà	-sòmà
420	tick (cattle or dog)	ikùùndyá	ŋkùùndyá	ŋkùùndyà	líŋkúpà
1034	tie (fasten) (vt)	-tùúŋgá	-tùúŋgá	-tùúŋgá, -lùgàlà	-tùúŋgá
258	tie up	-tùúŋgá	-tùúŋgá	-tùúŋgá	-tùúŋgá
978	tingle with excitement	ìsátólâ ?	-itímùlílà	-	-ìsísimòlà

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
119	tip, point	mhèlό	-	mpèlό	-
741	tobacco	ìtùúmbátí	nsùùŋkò	sùùŋhò	ìtááβè
146	today	lèèlό	wààléélò	wààléélò	wàáléélõ
742	toe	lwààlá, ìkùúlúmè	lyààlá, lìŋkúmyà	lyààlá, lìŋkúmwà	kààlá/mààlá
445	tomato	mànyáànyà	lònyáànyà	nyàànyà	m(ù)tòlè/màtòlè
105	tomcat (half-wild)	-	-	kǐmbólò	sìǐmbólò
743	tomorrow	ìgòlò	ìgòlò	ìgòlò	ìgòlò
166	tongue	lòlìmí	lòlìmí	lòlìmí	lòlìmí
120	tooth (canine), tooth filed to a point	-	-	màsòŋgà mbwá	-
267	tooth	liìnó	liìnó/miìnó	liìnó/miìnó	liìnó/miìnó
306	top, peak	kwìgólyà	hígòlyà	mpèlό	hìigólyà
293	tortoise	gùlùmààti	-	gùùmààti	fúúlwè
277	town	nsí	múji ?	kààyá	lògò
378	tramp of feet	lòkiíndó	lòkiíndó	lòkiíndó	m(ù)siíndó
270	travel	-yòómbá	-yòómbá	-yòómbá	-yà lògèèndò
540	tree	mòtí	mùtí	m(ù)tì	mùtí
538	tremble, shake (vi)	-dètèmà	-tètèmà	-tètèmà	-tètèmà
566	trickle away	-twìínâ	-sòlólà	-	-tóónyà
401	trunk (of elephant)	ŋwìtìló	-	kàβèkó	m(ù)kòòŋgà gwà nzóvû
604	try	-gèmà	-gèmà	-gèmà	-gèmà
605	tsetse-fly	màsààli, gòbólò	lògèémbé	kàgèèmbè	ntiikà
938	turn upside down, turn over	-pìǐndòlà	-gàlòlà	-gàlòlà	-pilòlà
174	turn round	-yòómbyà	-pìlímyà	-pìlímyà	-zòŋgólósyà
711	tusk, elephant's (middle size) *	-	liìnó lyà nzóvù	miíinó gá nzóβú/mpòlì	-
452	twin	ìβàsá/màβàsá	màpàsá	màpàsá, màβàsá	ìpàsá/màpàsá

No	English	KìDàkámà	KìNyànyèèmbé	KìKónòóŋgò	SìGàlàgàànzà
185	twist roll, spin with fingers	-sògòtà ?	-sàkàtà ?	-pèlègà	-sògòtà
483	twist, esp strands	-shíβà	-pèlà	-pèlègà	-
752	two	iβílí	iβílí	ìβílí	iβílí
18	udder	kìβèélê	kìβèélè	kìβéélè	-
945	uncover, reveal	-kùúndólâ	-kùndúkòlà	-kùndúkòlà	-vúndúkòlà
551	unripe, half grown	-βìsí	-gàágì	itìndì, -βìsí	itìndì
994	unripe, uncooked	-βìsí	mbìsí	-βìsí	-βìsí
311	up, above	hìgólyà	hìgólyà	hìgólyà	hìgólyà
614	upright	wìímâ	wìímà	wíímà	wíímà
446	urinate/defecate	-nyà, -sùβàálà	-nìà, -sùβàálà	-nìà, -sùβàálà	-nìà, -sùβàálà
745	urine	mààsù	mààsú	màtùùnzí	màsù
569	use	-tòmílâ	-tòmílà	-tòmílà	-tòmílà
307	utmost, highest point	hàlíkílò	hìgólyà	kwígòlyà	-
904	vapour, gas	βòsèβú ?	mùtùŋkìlílò	ìtùtú	mùvúúkè ?
380	vein	ŋwàànzí/myàànzí	mùshìpá ?	m(ù)sìpá	-
276	village	kìβàándà, igòóŋgólí	kijííji ?	ìgòŋgòlí	ìgòóŋgólí
692	virgin (bride), girl	mùùnyhá	mwánìkì	mwánìkì	mwánìkí
327	vision	βòβóní	ndòòtí	ndòótí	ndòótí
330	voice, (thunder)	lòkóβá	mùzì	m(ù)zwì	mùzwí
224	vomit	-lòká	-lòká	-lòká	-lòká
524	walk (take a)	-yòómbá	-yòómbá	-yòómbá	-túmbágílà
269a	walk	-jà	-yà	-yà	-yà
847	wall	hàándì	ìgèlélé	ìgèlélé	ìgèlélé
983	want, need, wish	-kòòβà	-kòòβà	-kòòβà	-kòòβà
507	war	βòlógó	wòlógó	wólógò	vìtà ?
790	wart-hog	ŋgìlì	ŋgìlì	ŋgìlì	ŋgìlì
860	wash oneself (after evacuating)	-ishénèènhà	-tàβààsyà ?	-ìpyáágólà, -syèènèntèlà	-ìpyáágólà, -ìpípá, -ìsyénèèntà

No	English	KíDàkámà	KìNyànyèèmbè	KìKòɲòòŋgò	SiGàlàgàànzà
127	wash (hands)	-ìgúúsà	-kùùsà	-ìkálábà	-ìkálàbà
128	wash (clothes)	-kàánzá	-kàánzá	-káánzá	-kàánzá
129	wash, take a bath	-òògá	-òògá	-òògá	-óògá
322	water	mìínzí	mìínzí	mìínzí	mìínzí
959	wave, let off a trap, remove a spell	-lògòòlà	-tèólòlà	-lògòòlòlà	-lògòòlà
1017	we	yìíswé	ìíswé	yíiswé	ifwé
1010	weak	-zòβú	-	-nògólékú	-zòhàálà
881	wean a child, give leave, send away	-gíjà	lèkyà	-lècà	-zìzyà
234	wear, dress	-zwàálâ	-vwàálà	-zwàálà	-vwàálà, -àámbàlà
501	weave, knit	-sùmá, -fúùmà ?	-fùùmá	-sùmá	-fùmá
1015	weight, rhythm	βòtìímbú	òtìímbú	-βòtìmbú	βòtìmbé
210	well	lwìínzí	lwìínzí	lwíinzí	ìzìβà
56	wet (get)	-dòtà	-lòβà	-tòtà	-tàβàlà
919	what?	kí	kí	kí	síí
469	which?	ìlì kínéhè	ìkí	yííhè	yàáhé
192	whistling	mùlòlí	mùlòónzi ?	m(ù)lòzi	mùlòzi
175	white man	mùzúúŋgù	mùzyùùnŋgù	mùzúŋgù	mùzyúúŋgù
610	white	yàápé	yàápé	mwèèlɔ́, yàápé	nyèèlú
918	who?	náánì	nàánì	ìnàání	ndèé
28	wicked	iβí	mbi	m(ù)kènàgòzi	iβí
339	wife	múkíímà	m(ù)kíímà, m(ù)ké	m(ù)kíímà	mùkíímà
187	wind up (thread)	-góóndà	-kòónjá ?	pilimyà, piligà	-gòóndà, -kòónzá ?
746	wind	mùyàgá	mùyàgá	mbèhò, mùyàgà, kìkùŋgòlyà	mbèhò, mùyàgá
937	winnow	-béétâ	-pèétà	-hèhá, -péétà, -hèhéélòzyà,	-hèhà, -pèétà, -èèlòòlà
112	wipe	-fùtà ?	-fùtà ?	-pyàágólà	-pyàágólà

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
88	wire (brass)	-	-	-	-
194	witchcraft	βʊ̀lògì	wʊ̀lòzì	ʊ̀lògì	βʊ̀lòzì
279a	withhold from	-ìimá	-ìimá	-ìimá	-ìimá
279	withhold from, abstain	-ìyíímá	-ìyíímá	-ìyìímá	-ìyíímá
338	woman	mùkǐímà	m(ù)kǐímà	m(ù)kǐímà	mùkíímà/βàkíímà
747	womb	ndà	ndà yà ʊ̀wʊ̀tí	vyáázyééŋgì	ndà yà βʊ̀βùtí
812	word	mùhàyò	mùhàyò/mìhàyò	múháyò	ìgààmbò/màgààmbò
772	work as a mason	-zèèŋgà	-zyèèŋgà	-zyèèŋgà	-zèèŋgà
167	work (n)	mùlǐmò	mùlǐmò/mìlǐmò	mùlǐmò	mìlǐmò
81	wrap up	-gòòndà	-gòòndà	-gòòndà	-pǐíndà
344	wring (clothes)	-nìnà	-kàmá	-mìnyà	-kàmʊ̀ʊ̀là
773	yawn	-ààyʊ́lâ	-ààyʊ́là	-ààyʊ̀là	-àyʊ́ʊ́là
593	year	ŋwàáká	mwàká	mwáká	mwàáká/myàáká
750	yesterday	ìgòlò	ìgòlò	ìgòlò	ìgòlò
15	you (sing.)	βèèβé	èèβé	βèèβé	èwé
1018	you (pl.)	ìiŋwé	ìiŋwé	yìiŋwé	ǐmwé
715	young man	mùyàándà	m(ù)sʊ̀ʊ̀mbà	mùsʊ̀ʊ̀mbà	mùyàándà
637	your(s) (pl. 2nd) person)	ìíŋwè	yìíŋwè	yìínwè	ìínú
693	youth	mùyàándà	m(ù)sʊ̀ʊ̀mbà, mwáníkǐ	mùyáándà, mwàníkǐ	mùsʊ̀ʊ̀mbà, mwàáníkǐ
292	zebra	ndʊ̀ʊ́lʊ̀	ndʊ̀ʊ́lʊ̀	ndʊ̀ʊ́lʊ̀	-

Appendix 1. Zone F word-list: F21

No	English	KìmùnàSùkùmà	JìnàKǐìyâ	GìnàNtùzù
133	abdomen, stomach, belly	ndà, ŋhùùmbǐ	ndà, ŋhùùmbǐ	ŋhùùmbǐ, ndà
495	abscess, boil	ìβùtê	ìβùtê/màβùtê	ìβùtè
786a	abundant/abound	kòkólâ	-sèèsà, -pá	-pá

No	English	KìmùnàSùkùmà	JinàKììyâ	GìnàNtùzù
786	abundant	kòkólâ	-ìǐŋgǐ, -a βòyàgà	-pá, niiŋgí
571	abuse, insult	-dòkìlâ	gòdòkǎ, gòdòkìlâ	gòdòkìlâ
252	abuse, reproach	-sòkòmbéjà	gòdòkà	gòdòkà
809	accustomed (get)	-mànìǐlà	gòmànìǐlà	gòmànìǐlà
274	act (vt)	-ìǐtà	gwìǐtǎ, gòtèèndà	gwìǐtà
229	add up	òòŋgèjà	gòsàànjà, gòòŋgèjà	gòòŋgèjà
927	adjacent (be); border (vi)	-ilòléélà, -zèèŋgànwà	gwìhèlâ, gòβìmbíkánà	gòβìmbìkánà
662	adze, carpenter's	mbìizò	mbìzò	mbìzò
254	affair	mhàyò, ŋgùnò	mhàyò/mìhàyò	mhàyò/mìhàyò
1002	afraid (be)	-òògòhá	gòògòhâ	gògòhâ
168	agriculture	ìlǐmà	ìlǐmà/βòlǐmì	ìlǐmà
926	all	-pyè, -òósè	pyé, -òòsê	-òòsê, -pyè
248	alter, change	-gàlòchà	gògàlòcà, gògàlòlà	gògàlòchà
595	animal	ndìmù	ndìmũ	ndìmù
617	answer a call	-idǐká, shòòkèjà	gwìdǐkâ	gùdǐkâ
782	answer, reply	-shòòshà	gòshòòshà	gòshòòshà
664	ant (reddish-brown biting)	shìílàámbá	jìɲègû, jìílàámbâ	sànàgú
122	ant-hill	shìgòlò	jìgòlò	gìgòlò
663	ant (small)	sòóŋgwà	mfà, nswà; sòóŋgwà	sòóŋgwà
586	anvil	ìpòòndèlò, ikòmélèlò	-	ìsùlìlô
989	apply by stretching, spread over	-βàámbà	gòβàámbà, gòkòmǎ, gògónyà	gòkòmà
976	appoint, set up	-ìmìlíchà, ìmìlíjà	gòsòmà, gòcàágòlà, gwìǐmìlíkà	gòtòòlâ
55	arm, hand	ŋkònò	ŋkònõ	ŋkònò
771	armpit	mháŋgwà	màáŋgwà	mhàáŋgwà
203	arrange, put in order	-tòòndà, -pàáŋgà	gòhèlà	gògèlèkà
204	arrange, put right, repair	-βèègélèjà, -shòòkèjà	gòβèèjâ	gòβèèjâ
478	arrive	-shìkà	gòshìgà	gòsìkà
665	arrow	ìsòòŋgà	ìsòòŋgà	ìsòòŋgà

No	English	KìmùnàSùkùmà	JìnàKììyâ	GìnàNtùzù
666	arrow (head of); spear head	ìchìmù, ntwè gwí' chìmù	ntwẽ, sònò	sònò
337	ashes	màβù	ìβũ/màβũ	iβú/màβù
199	ask for	-lòòmbà	gòlòòmbá	gòlòòmbà
89	assemble, collect (vt)	-βilìiŋgâ, -kùmùùŋgâ	gòsòògà, gòsòlélèjà	gòsòòmbyà
789	aunt (father's sister)	sèèŋgí	sèéŋgî	sèèŋgí
148	avoid, dodge	-lèkà, -gwèèpà	gwìlìgá	gùlìgá, gògwèèpá
688	awe, fear of God	βùzùnyà	βòòβă, lyògòhyá, gòzùnyà	βùshígwà
667	axe	mbàsà	mbàsă	mbàsà
364	baboon, ape	ŋgòkò	ŋgòkò	ŋgòkò
634	back of (at the)	kòònùmà	nùmà	gòònùmà
297	back	ŋgòòŋgò	ŋgòòŋgò	ŋgòòŋgò
297a	backbone	ìsànàgòòŋgò	ìsànàgóóŋgó	ìsànàgóóŋgó
27	bad	-βì	-βĩ	-àà βòβì
37	bad (become), rotten (vi)	-βòlà	gòβòlà	gòβòlà
87	bait	wàmbó	cààmbò	wààmbò
398	banana (plant)	ìdòòkè	ndòòkè/mìdòòkè	ndòòkè
397	banana (fruit)	ndòòkè	ìdòòkè	ndòòkè
399	banana (for cooking)	ìdòòkè	ìdòòkè	ndòòkè
1005	baobab	ŋwààndó	ŋwààndô	ŋwààndó
1022	bark (of tree)	ìgòólà, ìgàámbà	ìgõlà	ìhàáŋgò
313	barren (of living being)	ŋgòòmbà	ndààsà, ŋgòòmbà	ŋgòòmbà
314	barren (of land)	ŋhàzù	ìbààmbásí, ìwàáwà	iβààmbásí
376	base of tree-trunk	itìnà	ìtínã	itìnà
650	bask (in the sun), warm oneself	-òòtà	gòòtì sánã < gòòtà ísánà < gòòtã ìsánà	gòòtà
576	basket of open wicker-work	ŋgònò	càànjò, ndàndàmô	ìsàànzò
577	basket (plaited)	shìgábò	jìgãbò	gìgábù, gànànà, ìsòònzò
643	bathe	-òògà	gòògã	gòògà
498	be fitting, behove	-iìgèlâ	gòβìizá cèénè, gòshìgàànà	gòβèèmbá

No	English	KìmùnàSùkùmà	JinàKìǐyā	GìnàNtùzù
1	be, become	-βi, -βìizâ	gòβiizá, gòβī	gòβi, gòβiizá
955	beach, coast, shore	ŋhwàànì	wààlò, ŋhwààní	ŋhwààní
827	bead(s)	βòsàlò	βòsàlō	βòsàlò
416	bean, kind of bean (from *Phaseolus vulgaris*)	ndùùlù	lòshiili/shiili	siili
417	bean, small (from bean plant)	màhàlàgè	ìhàlàgè/màhàlàgè	màzòlékà
844	bean (runner)	lòshiili	lòshiili/shiili	siili
1037	bear child	-βyààlâ	gòβyààlā	gòβyààlā
147	beard	ndèzù	ndèzù	ndèzù
768	beat	-tòlà	gòtòlā	gòtòlà
759	beautiful	yà wiizà	-sògà, -ìzà	-sòòmbà
162	bed	βòlìilī	βòlìilī	βòlìilī
161	bedstead	βòlìilī, lòtàlà, ìtù/màtù	βòlìilī	βòlìilī
653	bee	nzòkī	nzòkī	nzòòkī
775	beer	wààlwà	wààlwā, βòsèlè, màsélè	wààlwà
497	befit, suit	-βèèlélà, -iigèlâ	gwigèlèélwà, gòβèèlélà	gòβèèlélà
101	below, underneath	hàsìlílī	hààsī, mùùsī	hààsī
186	bend, twist (vi)	-pìǐndà, -sòβyà	gòkùnà, gògòòndà	gòliiŋgà
468	bend (vt)	-gòòndà	gògòmà, gògònà, gògòòndà	gògòmâ
193	bewitch	-lògà	gòlògà	gòlògà
930	bifurcation, cross-roads	nzìlà mààkâ	nzìlà màákâ, màβàsà	nzìlà mààkâ
222	bile	ndòlò	ndòlō	ndòlò
262	bind up, splice	-làgòlà,	gògàaŋgá, gòtùùŋgá	gòlòòŋgànyà
658	bird-lime	wiilèmbô	wīlèmbō, βònàlā	βòlèèmbô
811	bird	nòni	nòni	nòni
46	birth (give), to a child	-βyààlâ	gòβyààlā	gòβyààlâ
125	bite	-lùmà	gòlùmā	gòlùmà
221	bitter	ndòlò	-lòlò, ndòlō	-lòlò

No	English	KìmùnàSùkùmà	JinàKìiyâ	GìnàNtùzù
223	bladder	mfùkò gò mìinè	ìtùùnjì	ìtùùnzì
482	blind person	mòkù	mbòkù	mòkù
669	blood	miínìiŋgâ	mìnìiŋgâ	mínìiŋgâ
496	blow on, blow up	-fùùlà	gòfùùlà, gòfùùbà,	gòfùùlà
238	blow bellows	-fùùlà mòòtò	gòpùgùtà	gòfùùlìilà
463	blow away	-yèŋgèèjá	gòfèèfùlà, gòhwèèhùlà, gòhèhèèjâ	gòlàjá
776	boast, brag, praise oneself	-ìsànyâ	gwìhàyâ, gwìhájá, gwìgìimbâ, gwìhàlálà	gòdòòsà, gòßòná
676	boat	lyàátò	ìbìinhì, lyàátò	lyàátò
670	body	mìlì	-mìlì < mùßìlì	mìlì/mimìlì
581	boil up	-dùdùmà	gòpògòmà, gòßìlìlà	gòsìßòkà
30	boil (vt)	-sèbyà	gòsèßyà, gòsìßòcà	gòsìßòchà
433	bone	lìgùhà	ìgùhă/màgùhă	ìgùhà
564	bore a hole	-bùlòlâ	gòciβòlâ, gòdòlă	chiβòlâ
1008	born (be)	-βyàálwâ	gòβyàálwâ <βyàálâ	gòβyàálwâ
910	borrow	-bòkà	gòlàándà	gògòpà
872	bottle	jòbâ	jòbâ	jòbâ
928	boundary	lòßìimbì, ŋgèlèlò	lòßìimbí	lòßìimbí
671	bow, bending	wìgòóndè	ßòtă	ßòtà
508	bow	ßòtà	ßòtă	ßòtà
953	bowstring	ßòjì bò ßótà	lògè, lùgòyè	lògè
58	brain	ßòòŋgò	ßòòŋgò	ßòòŋgò
509	branch	ìtàámbí	ìtàámbí	ìtàámbì
375	bread	ŋgàátì	ŋgàátí	ßòfùló, ŋgàátì
831	break wind*	-bùùlâ	gòjùùcà, gònya ìfùjì	gònyà ìsùzì
77	break, snap	kòßìinzà	gòßìinzá	gòßìinzà
1036	break wind	-bùùlá ìfùdì	gòjùùcà, gònya ìfùjì	gònyà ìsùzì
17	breast (of a woman)	ndùtù, lònòónô, mbèèlê	lòßèèlê, lònòónhô	nòónô, mbèèlê

No	English	KìmùnàSùkùmà	JìnàKììyâ	GìnàNtùzù
489	breath, breathing	myòòyì	myòòyě, jèshèèmò	myòòyì
490	breathe, rest	-èshèèmhà	gwèèshèèmà	gwèèshèèmà
138	bridge	nhààmbòkìlò	lòdàànhò	lòdàànhò
139	bridge (wooden)	ìkìlìlô	lòdàànhò	lòdàànhò
885	bring, fetch	-èènhà	gwèènhà	gwèènhà
171	bring to light	-ènhèlèjà	gòßyòòcà, gòmànìlìcà, gòfùnyà	gòkùmòòchâ
882	bring up (a child)	-lèlà	gòlèlà	gòkòjà
660	brook, stream	kàhùlúlù, kàmòóŋgò	lòóŋgà	lòóŋgà
942	broom	ìkòòmbò	cèèyò, ìkòòmbò	ìkòòmbò
113	broth	nsòjì	nsòjī/mìsòjī	nsòzì
381	brother-in-law, sister-in-law	ŋkwèèlâ	ŋkwèèlâ	ŋkwèélà
341	brother (older)	ŋkòlò	ŋkòlŏ, nsìzǎ	ŋkòlò (óónè)
673	brother, relative, fellow-tribesman	ndògò	ndògŏ	ndògò
874	bruise badly, take the skin off	-chòòßòlà	gòkòòzòlà, gòßàágâ, gòcòòßòlà	gòkùúßòlà
71	buffalo	mbògò	mbògŏ	mbògò
807	build	-zèèŋgà	gòzèèŋgà	gòzèèŋgà
674	bull	nzàgàmbâ	nzàgàámbâ	nzàgàámbâ
80	bunch (of hair)	nshìinji	nshìinjī	nzwìlí, isìinzì
890	burden, load	nigò	nigŏ	nigò
645	burn (vt & vi)	-ßàkà	gòòcà, gòßàcǎ, gòßákǎ	gòßàkà
231	burnt (become)	-pyà, nyègètèlà	gòpyà/gòpìà, gòjìgǎ	gòzìgà
179	bury	-jìkà	gòjìkà	gòjìkà
555	bush	ìpòòlù	ìsǎgà, ìpòòlù	ìpòòlú
21	buttermilk	màßèèlé màlàálà	màlílòtò, màßòßòtò	màßòßòtò, màsúkè
514	buttocks	ìdàkò/màdàkò	ìdàkŏ/màdàkŏ	ìdàkò/màdàkò
301	buy	-gòlà	gògòlà	gògòlà
873	calabash	ìtòlò	jìsàáßò, sòhǎ	gìsàáßò

No	English	KìmùnàSùkùmà	JìnàKììyâ	GìnàNtùzù
857	calf of the leg	sàkù	sàlùdâ	sàlùtâ
877	calf	ndàmà	ndàmà, ndìlàáànhà	ndàmà, ndìlàánhà
31	call	-ìtànâ	gwìtànâ	gùtànâ
675	canoe (dug-out)	ŋgàlàßà	ìbìînhì, lyàátò	lyàátò
602	canoe	lyàátò	ìbîînhì, lyàátò	lyàátò
993	*carry a child on the back (in a blanket)*	ìíßàlâ	gwìßàlâ	gúßàlâ
567	carry/lift on to head (take up) a heavy load	ìdìîkâ	gwìdìîkâ	gùdìîkâ
97	carry astride on the hip	-kìlìjâ	gòbàápà	gòlèlà
560	carry, take	-ßòòchâ	gòßòòcâ	gòßòòchâ
578	carry, convey	-twàálâ	gòßòòcâ, gòshìshà	gòchàálâ
104	cat	nyàáßù, ßùúshi	njááŋgò, nyàáßù	nyàáßù
286	cattle	mìtùgò	mìtùgô	mìtùgò
486	cease, finish	-shìlà	gòshìlà	gòsìlà
526	centipede	ndùmìlá hàßìlì	ndùmìláhàßìlí	gìifúúlè
247	change, turn round	-gàlòkà	gògàlòkà	gògàlòkà
334	charcoal	ìkàlà/màkàlà	ìkàlà/màkàlà	ìkàlà/màkàlà
963	*charm (esp. to ensure wife's fidelity) (n)*	*lòkòmòòlô, lòtéégò*	*lòkàgô, lòsòòmbó, lòkòmòòlô*	sàámbà
32	chase (away)	-pèèjà	gòpèèjà)	gòpèèjà
515	cheek	ìsàyà, ìtàmà	ìtàmà, ìsàyà	ìsàyà
92	cheerful (become)	-zàlàßánà, zàlàmúkà, (sàŋgáßàlà)	gòsàáŋgáßálà	gòyègà
106	cheetah	-	-	nánà
585	chest	shíkúßá	jìkùßà	gìkùßà
672	chest (of animals and birds)	shìgùùkù	jìgùùkù	gìdáli
431	chief, headman	ŋkòjìwà	ntèmî/ßàtèmî	ŋkòjìwà
431a	chief	ntèmì	ŋwànàáŋgwà	ntèmì

No	English	KìmùnàSùkùmà	JinàKììyâ	GìnàNtùzù
679	child, infant	ŋwèèlèélè, nìgìnì, ŋwàànà	ŋwàànǎ, nìgìní, ŋwèèlèélè	ŋwàànà, nìgìnì, ŋwèèlèélè
597	child, offspring	ŋwàànà	ŋwàànǎ	ŋwàànà
886	chin	shìlèzù	jìlèzù	gìlèzù
83	choose	-chàágòlà	gòcàágòlà	gòlòònjà
109	civet cat	nhùùŋgò	jèèwê	nhùùŋgò
255	clan	lògàándà	ntàlǎ, lògàándà	ßòdògò
841	climb, ascend	-lììnhâ, fèètèlà	gòlìinhâ, gòdàánhà	gòlìinhâ
550	clod, lump	ìgèèŋgèlì, ìlíndò	ìkìíndò, ìlòóŋhò	ìkìíndò
851	close (the eyes, mouth, etc.)	-lìlìmà	gòlìlìmà (eyes), gòmìmyǎ (mouth, anus),	gòlìlìmà, gòkùùmbà
299	cloth	shìtàámbàálà	jìtàámbàlàlà	gìtàámbàálà
235	clothe	-zwìichâ	gòzùìkâ/gòzwìikâ	gòzwàájâ
300	clothes, material	myèèndà, ŋgòßò	ŋwèèndǎ/mìèndà = myèndǎ	ŋgòßò
305	cloud	ìlùùndè	ìlùùndè/málùùndè	ìlùùndè
817	coagulate	-làálâ	gòlàálâ	gòlàálâ
941	cobra (spitting)	swìílà	fíílà, jìpàlǎnòòŋgá	swìílà
906	cohabit	-ìtòòmbâ	gwìlàálâ	gòlèhyà
465	cold	lònyìlì	mbèhò	mbèhò
624	come	-ìlzà	gwìzà	gùzà
505	come on suddenly, take in the act	sàáŋgìlǐjà	gòsàŋgànìjà, gòtùgǎ	gòtùùùŋgìlǐjà
230	construct, put together	-ßèèjâ, -hòòndà	gòßèèjâ	gòfùlà
471	cook	-zùgà	gòzùgǎ	gòzùgà
557	cook in water or fat	-sèßyà	gòtògòtyà, gòsìßòcà	gòpògòmyà
43	cooking pan, small	lìikǐjò	lòßǐgá, lòsènèkô	nùúŋgò
385	cool (become); get well	-pòlà	gòpòlà, gòhòlà	gòpìlà, gòpòlà, gòlùjà
265	copper, brass	shàbà	shǎßà?	shàßâ
283	copy a pattern	-lòòndèlèjà	gòlòòndèlèjà gòkòòßìlǐjà	gòshòòkèèlà

No	English	KìmùnàSùkùmà	JinàKììyâ	GìnàNtùzù
894	cork, stopper	ìkùndìkíjò	ìciβìjô, ìkùndíkíjò	ìkùndìkíjò
52	corpse, carcass	mìimbã	mìimbá (mu-βìimbá)	nyàmàfû ?
1001	corpse (human)	mìlì	mìimbá	mìimbà
383	cough (vi)	-kòlòlâ	gòkòlòlâ	gòkòlòlâ
4	count	-βàlà	gòβàlà	gòβàlà
100	country (our)	sǐ	sǐ yìísè	sǐ yìiswé
14	courtyard	lùgàáŋgâ	gwàálùgwâ, lòβòògâ	lòβòògâ
852	cover (up)	-kùndìkíjà	gòkòndíkíjà, gòkòndíkílà, gògùbã, gòkùùmbà	gòkùùndìkìjà, gògùbà
285	cow	ŋòòmbè	ŋòòmbè	ŋòòmbè
1003	coward	ŋòòβà	ŋòòβã	ŋòòβà
335	crab	ìgègèlèkà	ŋgègèlèhyá	hàgà
520	crawl, creep	-làándàálà	gwàágùlâ, gòshòòlòmà	gwàágùlâ
612	cricket	tòndògòsò	jìyèènzé, jìnyèènzélèlà	shèènyê
153	cripple	nèmà	nèmã	ndèβílè
803	crocodile	ŋwìînà	ŋwînà	ŋɔ̀nà
319	cross (a river)	-kìlà	gòkìlã	gòkìlà
846	crow (n)	ŋhòóŋgòòlò	ŋhòóŋgòòló	ŋhòóŋgòòlõ
308	crown of the head	ntwè gátǐ	lòòndójî, mhàándà/nhàándà	ntwè gátǐ, (lòòndóózi)
79	crumple	-hàliβòlà	gòkùnã	gòliiŋgàlííŋgà
370	crush by pounding, pulverize	-kòmàáŋgâ	gòpòòndà, gòbùùdâ gòpòòndàgùlà	gòtwàáŋgà
393	crust	βògókwà	ŋgòkõlò	lògòkòló
160	cry, wail	-lîlà	gòlîlà, gòŋòólâ	gòlîlà, gwàánà
966	cucumber, small	liimbê	liimbê	liimbê
736	cudgel	ŋhóómè, lòβúgù	ìgòòŋhó/màgòòŋhó, ìlàáŋhà	βòhili
165	cultivate	-lîmà	gòlîmà	gòlîmà
950	cure, cool, heal	-pòjà	gòpòlã, gòpîlà	gòpîjà

No	English	KìmùnàSùkùmà	JìnàKììyâ	GìnàNtùzù
355	cut	-βùtà	gòtèmà, gòβùtă, gòtìnà	gòβùtà
98	cut, lop	-gèèdéjà	gòsèèŋgà	gòswèèkèlà
117	cut to shape, sharpen to a point	-pòònzà, -sòòŋgòlà	gòsòònjà, gòsòòŋgòlà, gònòòlà, gòpòònzà	gòpòònzà
365	dance (of men, to show courage)	-itààmbóká	gòtààmbfílà	gòβìnà
53	dance	-βìnà	gòβìnă	gòβìnà
622	dark, black	yàápì	gìitî, -pi	-pì
481	darkness	gìiti	gìitî	gìiti
824	dawn (vi)	kwàŋgàlòká	màkìîŋgó, gwèèlă	gwàáŋgàlóká
359	dawn, daybreak	màkìîŋgò	ìkìîŋgó	gwèèlà
744	day after tomorrow	ntòóndò βòòŋgì	màzòòlí	ntòndòòngì
130	day	lòshíkò	lòshîgò	lòsíkò
682	day-time	lîîmì	lîîmî	lîîmì
869	day (all)	lòshíkò pyè	lîîmî bû	lîîmì jì
751	day before yesterday	màzòòlì	màzòòlí	màzòòlì
423	dead person	mfù	mfũ	nzùmààlîkè
424	death	lòfù	lòfũ	lòsù
931	decorate	-tònà, -tòóndà	gòtònă, gòkómă, gòβèègélèjà	gòβèègélèjà
446a	defecate	-nyà	gònyà	gònyà
631	denial	βòlèmì	βòlèmì	nèmò
821	deny	-lèmà	gòlèmà	gòlèmà
648	destroy, spoil	-βìihyâ, -βìipyâ	gòβìipyâ	gòβìipyâ
437	dew	lòmè	lòmè	lòmè
219	die (cause to); put to death*	-βòlàgâ	gòβòlàgâ	gòβòlàgâ
1027	die *	-chà	gòcă < cìà	gòchà
425	die	-chà	gòcă/cìà	gòchà
504	dig up, dig out	-jòòlà	gòfùgòòlà, gòjòkòòlà	gòsùkòòlà
503	dig	-sîîmbà	gòsîîmbà	gòsîîmbà

No	English	KìmùnàSùkùmà	JìnàKììyâ	GìnàNtùzù
466	diminish, grow less	-gèèdélà, -gèèhâ	gògèèhâ, gòdòòhâ	gògèèhâ
635	dip	-dábyà	gòsòòmbyá, -zòßìkà, gòdàbyà, gòkòjà	gòsòòmbyá
49	dirt	ßòsósò	ìkõ/màkõ	-sósò
680	district, province, country	ìgòòŋgòlì	jìßàndà, cààlò, sǐ	ìgòòŋgòlí
245	divide	-gàßìlà	gògàßà, gògàßàànyʰà	gògàßàànyʰà
512	divorce	-lèkàànà	gòlèkàànà, ßòjĩmò <gòjimòlà	ndèkàànyà
367	do, complete, finish	-màlà	gòmàlà	gòmàlà
366	do	-ɨ̀ɨ̀tà	gwɨ̀ɨ̀tǎ	gwɨ̀ɨ̀tà
60	dog	mvà [ɱvà]	mvǎ /ɱvǎ	mvà [ɱvà]
292a	donkey	nzòßè	nzòßě	nzòßè
685	door	nyàáŋgò	ɲàáŋgò, lwɨ̀gɨ̀	nyàáŋgò
415	dove (red-eyed)	mhùúndà	ŋhòóló, ŋhèélè	ŋhúndè
188	doze	-tìíndɨ̀lâ, -hìŋgèélâ	gòtìíndɨ̀lâ	gòtìíndɨ̀lâ
529	draw water (from well)	-dàhà	gòdàhǎ, gòjɨ̀ɨ̀là	gòdàhà mɨ́ínzɨ̀
215	dream (vt, vi)	-lòòtâ	gòlòòtâ	gòlòòtâ
328	dream (n)	shìlòòti	jìlòòtí	gɨ̀lòòtí
448	drink	ŋwà	gòŋwǎ	gòŋwà
196	drizzle	lòzùùlèzùúlè, màswàlálà	gàfààlálà, gàswààlálà	màswààlálà
780	drop, throw down	-sùùŋgòlâ	gòpòŋà, gògùmà, gògwìíshà	gògwìíshà
284	drum	ŋòmà	ŋòmà	ŋòmà
598	dry (vt), set out to dry	-àànìkɨ́là, -àànikɨ́jà	gwàànìkɨ́là, gwàànɨ̀kâ	gwànikɨ́jà
346	dry	nyòòmù	-òòmũ	-òòmù
954	dry up, ebb	-tìíndòhâ	gòkàmǎ	gògèèhâ
345	dry up, become dry	-kàmà	gòòmǎ	gòòmà
289	duck	mbàátà	mbàátà	mbàátà
243	dust, cloud of dust	lòßùùßù	lòßùùßú, lòkòòŋgõ	lòßùùßù
628	dwell	-igáàshà, -ìikàlà	gwɨ̀kàlà, gwɨ̀gàáshà	gògɨ̀ɨ̀shâ

No	English	KìmùnàSùkùmà	JinàKììyâ	GìnàNtùzù
492	eagerness, zeal	ŋhùòmbŏ	jàáhà, lwààhààhí	gòβùlùgútà
491	eagle, bird of prey	ìnàándà	mbèèshì	ìkòònâ
563	ear	gòtò	gòtŏ	gòtò
70	earth, land	sì	sĭ	sì
44	earthenware vessel for serving up food	lìikìjò	lòβĭgà, nùúŋgò	lwààβyâ
156	eat	-lyà	gòlyă/lià	gòlyà
900	effort, exertion	wìhàámbì	ŋgùzù	βòkòmàgóki
273	egg	ìgĭ	ìgĭ/màgĭ	ìgì/màgì
443	eight	ìnàánè	ìnàánè	ìnàánè
705a	elbow	ìgòòkóólà	ìgòòkóólă	ìgòòkóólà
329	elephant	mhòlì	mhòlì	mhòlì
336	embers	ìkàlá	ìkàlă (lyà mòtŏ) = ìkàlà lyá mótŏ	ìkàlà/màkàlà
842	embrace	-kùmbàtílà	gòkùmbátílà, gòβùgă	gògùùmbà
394	end (come to an), cease	-gèlèlà	gòòyà, gòshìlă	gòòyà
952	escape, recover	-pìlà, -pòlògòkà	gòpòlògòkà, gòpìlà	gòpìlà
899	examine, measure, test	-gèlèkà, -pìímà	gògèmà, gògèlèkà	gògèlà
45	excrement, dung	màáshì	màáshĭ	màáshì
958	exorcise, drive out a devil	-pèèjà	gòlàgòlà, gòβìnà βófùmŭ	gòpèèjà màsàámvà
784	explain	-lòmèèlà, -sòòmbòòlà, -hàyà	gòshòòmélèjà, gòwìílâ, gòsòòmbòòlà	gòwìílâ
620	eye	lìisò/mìisò	lìisŏ/mìsŏ	lìisò
828	eyebrow	ŋgòhè, màkùùmbìísò	màkùùmbìísò	màgòhè
838	eyelash	ŋgòhè	lògòhĕ/ŋgòhĕ	ìgòhè
587	face downwards	-βùndàálâ	gòβùndáálâ	gòβǒndàálâ
686	face	βòshò	βòshŏ	βòshò
940	fade, disappear	-shìlíílà	gòjìmă, gòlìmàlímà, gòjimìílâ	gòsìlà

No	English	KìmùnàSùkùmà	JinàKìǐyâ	GìnàNtùzù
891	faint, lose consciousness	-jìmà	gòfèèlwà, gòcà gáβìmbá gá ŋgĭ <gòcǎ gàβìmbà gà ŋgĭ	gòfèèlwà
298	fall	-gwà	gògùà/gwà	gògwà
549	fall short	-lèβèèlwá, -shìlíílwà	gòlèβǎ, gòlèβèlâ	gògèèhélwà
462	fan, wave	-pùùŋgìlà	gòpùùgìǐlà, gòhèhéèlà	gòpùùgìǐlà
764	far	kòlè	-kòlè	kòlè
921	fat (be) (of animals)	-gìnà	gògìnà, gònònà	gònònà, gògìnà
922	fat (of animals)	-gìnù	-gìnŭ	-gìnù, -nònù
531a	father	βààβâ	βààβâ	βààβâ
382	father-in-law, mother-in-law	βàáβà/màáyò βókò	βàáβà/màáyò βòkò	βàáβà/màáyò βókò
531	father (my)	βààβâ	βààβâ	βààβâ
687	fear	βòòβà	βòòβǎ, tìnìínì	βòòβà
652	feathers, fur	βòòyà	βòòyǎ	βòòyà
848	fence, enclosure	ŋgìtìlì	lògǒtò, ìgòóβè, lòòβâ	lòòβâ
858	ferment, turn sour	lòlà (gààsà)	gòlòjà, gòlòlà, gògààsà	gògààsà
762	few (a), not much	-gèèhù	-gèèhú	ŋgèèhù
757	fierce, sharp	ŋhàlĭ/-kàlĭ	-kàlĭ, -òògĭ	ŋhàlĭ/-kàlĭ
421	fig-tree	-	-	ntiíní
422	fig-mulberry tree	ŋkòyó	ŋkòyǒ/mìkòyǒ	ŋkòyò
216	fight	-lwà	gwĭkènyâ, gòlwà/lùà	gòkènyâ
804	fill	-òòkòjâ	gòòkàlâ	gòmàtà
176	fill a hole, stop up	-chìβà	gòcìβǎ	gòchìβà
583	filter, strain	-kènènhéjà	gòyòòŋgà, gòkènènâ, gògidà	gòswìizà
50	filth	βòsósò	-sòsò	màkàámbàlàlà
516	final, decisive	ŋhàlìkíjò < -kàlà 'end'	ŋgèlèlò, ŋhàlĭlô <gòkàlǎ/gòkàlìkâ	ŋgèlèlò
760	fine, excellent	nsòòmbà, nyèèlá	-sógǎ, -ìzǎ, -sòòmbà	-sòòmbà, -iìza
447	finger	lwààlà	lwààlǎ/mààlǎ	lwààlà

No	English	KìmùnàSùkùmà	JinàKìǐyâ	GìnàNtùzù
323	fingernail	lyààlà	lyààlã/lwààlã/ŋjàálã	lyàálà
474	fire	mòòtò	mòòtõ	mòòtò
280	fireplace, hearth, kitchen	liìkò	liìkõ	liìkó
970a	firewood (collect, cut) (vt)	-sèènhâ	gòsèènâ, gòsòlèèlà	gòtòòlá ŋhò
413	firewood	ŋhwǐ	lòkwǐ/ŋhwǐ lòkõ/ŋhõ	ŋhò
191	fish up, pull out	-lòβà, -gwàápúlà	gòzùβòlà	gòlòβà, gòzùβà
126	fish (old Swahili *nswi*)	ndǐǐlô	shǐ	shǐ, ndǐǐlô
190	fish (vt), trap fish	-zùβà	gòzùβà	gòzùβà
400	fist	ŋgúmì	ŋgũmǐ, jiíŋhùndî	ŋgúmè
525	five	ìtàánô	ìtàánô	ìtàánô
493	flap wings wildly, flutter	-fùlùgùtà	gòbàbànà, gòbiìbìlnà	gòbàbànà
832	flatulence	-βiimbèèlwâ	ǐfùjǐ, njùùcò, gòbìzòkà, ndòsõ	gòbǐǐzùkà
384	flavoured (be properly)	-kòlélâ	gòlòòŋgà	gònónà
907	flower	βùláβò	βòlãβò, βòlãβò	βòláβò
278	fly (house)	ŋgì	ŋgǐ	ŋgì
1028	fly (vi)	-làlà	gòlàlã	gòlàlà
1032	foam *	ìfùlò	ìfùlõ/màfùlõ	ìfùlò
502	foam	ìfùlò	ìfùlõ/màfùlõ	ìfùlò
143	follow (in order)	ìlòòndéélà	gòlòòndèjà	gòjìǐlìǐlà, gòlòòndèèlà
142	follow	-kòòβǐjà	gòlòòndèjà, gòkòòβǐjà	gòkòòβǐjà
823	food supply for a journey	mhàámbà	mhàámbà	mhàámbà
556	forest	ìpòòlù	βõ, ǐpòòlú	ìpòòlù
584	forge	-sùlà shòògǐ	gòfùlã	gòsùlà
889	forget	-ǐǐβà	gwìǐβà	gwìǐβà
458	fork, bifurcation	nzìlà màákã	ìβàsã, ìpàgàlà	ŋgwáákò, lògòkò
442	four	ìnê	ìnê	ìnè
295	frog	dòòŋgò	dààŋgà	dàáŋgà
574	fruit	βòtòóndwà	-	màtwàájõ

No	English	KìmùnàSùkùmà	JìnàKììyâ	GìnàNtùzù
349	fry	-kàlàáŋgâ	gòkàlàáŋgâ	gòkàlàáŋgâ
936	fully developed, be	-àálòkà	gòkòméélà, gòkòlâ	gòshìkàánà
625	full (become)	-òòkòlâ	gòòkàlâ	gòmàdìkà, gòòkàlà
316	garden	shìlùgù	jìsàsɪ̀là, jìlàáβà	ilàgò
419	gather (flowers, fruit)	-yòβà, -sùúŋgòlâ	gòyòβà	gògèsà, gòyòβà, gòsòlà
91	gathered (be), assembled (be)	-iβìliŋgà	gwìβìlííŋgâ	gòmàányhâ
368	gazelle (Grant's)	làálà	làálà, ɲjà	làálà, ɲjà
454	gazelle, small (impala)	mhàlà	mhàlà	mhálà
108	genet (kind of speckled civet cat)	nhùúŋgò	nhùúŋgò	nhùúŋgò
408	get, obtain	-pàándìkà	gòpàándìkà	gòpàándìkà
684	ghost, sudden apparition	kàβèèβà, nèŋgééji	ìhògì?	lìtùúŋgâ
568	giraffe	nhwìgà	nhìgà	nhìgà
246	give away (present)	-sàámbà	gòsàámbá, gònòòŋhá	gòsùnyà
449	give	-iinhâ	gwìnhâ	gùnhâ
916	give light to	-twiimà	gòtìmà	gùmìkà
815	glide, trickle	-sèlà	gòcòòlòlòkà, gòsòlòlókà	gòsèlà, gòhòòmà
269	go	-jà	gòjà/gòjìà	gòjà
639	go in, come in, enter	-iŋgɪ̀là	gwìŋgɪ̀lâ	gwììŋgɪ̀lâ
63	goat	mbòlì	mbòlī	mbòlì
694	goat, (he-)	ŋgùlyàátì	ŋgùlyàátì	ŋgùlyàátì
695	god	mùlùúŋgû	kòòβê, lyòòβà	lyòòβà, mùlùúŋgû
758	good	yà wiizà	-sògǎ, -ìzǎ	nsògà, -àà βùzà
388	goshawk (East African) (*Astur tachiro*)	húúŋgwè ?	-	lòβàlâ, ikòli
68	grain (of cereal)	lòβèkè	lòβèkē/mbèkē	lòβèkè/mbèkè
696	grandfather	gòòkô	gòòkô	gòòkô
697	grandmother	màámâ	màámâ	màámâ

No	English	KìmùnàSùkùmà	JinàKìĭyā	GìnàNtùzù
432	grasp, hold in arm	-ùùmíĭlà, -dììmíĭlà	gòkùmbánĭjà, gòdììmā, gòdììmíĭlà	gùgùùmbà
698	grass, reeds	ìswà/màswà	màfà, màswà	màswà
406	grate	-kwààlà	gòkwààlà	gòkwààlà
409	great, powerful, big	nhààlè/-tààlè, -kòlò	-kòlõ, -tààlè, -dùmà	-tààlè/nhààlè, -kòlò
164	grief, sorrow	ßùsùndùhàzù	ßòpĭĭnà, ĭyòònzú	ßúsùndùhàzù
371	grind (grain with a millstone)	-shà	gòshìà/shà	gòshà
372	grind coarsely	-hàlàlà	gòhàlàlà	gòhàlàlà
212	groove, furrow	ihòlòmèlà	ŋhõlòòmbâ, ŋgòkă	lòóŋgà
801	ground, cultivated	ŋgòòndà	ŋgòòndà	ŋgòòndà
405	grow up, get large, become great	-kòlà	gòkòlă	gòkòlà
913	grow (of plants)	-mèlà, -mèlèèlà	gòzwà	gòzwà
461	grown (be fully)	-hòòlà	gòkòlă, gòkòméèlà	gòkòlà, gòòsòkâ
373	gruel, light porridge	ŋhòòmbâ	ŋhòòmbâ	ŋhòòmbâ
358	grunt, grumble	-kùùmà	gòkiimà	gòkùmyà
205	guide aright	-tòŋgéèlà	gòtòŋgéèlà	gòtòòŋgéélà
351	guinea-fowl	ŋhààŋgà	ŋhààŋgá	ŋhààŋgá
701	gun	ŋgòòŋgò	ŋgòòŋhó	ŋgòòŋhó
702	hair	lòywìĭlĭ	nzwìĭlĭ	isìĭnzì
977	hair (long straight- of animals and Europeans)	nshìĭnjì ?	wìtìĭŋgâ	ßòyèènzè (ßòtìĭŋgâ)
75	hair (white, grey)	lòbú/mbù	nzwĭ/nzòĭ, mvĭ	mvì
703	hand (flat of)	lòpĭ, ìpì	ìpĭ, lòpĭ/mhĭ	ìpì
157	hand, right	nìĭílà	nìĭílà	ßúlyò, ŋkònó nìĭílà
439	hand (left)	lòmósò	lòmòsò	lòmósò
476	handle, haft	mpìnì	mpìnĭ	mpìnì
779	hang in mid-air	-nùùŋgèlà	gwìniŋgélèjà, gòniŋgèèlà	gòniìŋgèèlà

No	English	KìmùnàSùkùmà	JìnàKììyâ	GìnàNtùzù
655	hard	-diìmù	-dàámú/-dàárń -diìmú/-diìrń	ndiìmù
377	hardship, distress	màkòyè	màkòyĕ	màkòyè
294	hare	sàyàáyi	lòŋwàándò	ßòŋàándò
781	haste	wàáŋgò	wàáŋgò wàáŋgò	wàáŋgò
795	hate, detest	-gilà	gòkòlwà	gòkòlwà
700	hay	màswà	màswà mòòmũ	ŋgitìli
678	head, chief person	ntàálè	ŋwànàáŋgwà, ŋkòlõ, nsòmbà ntàálè	ŋkòjiwà
356	head	*ntwè*	*ntwĕ/mìtwĕ*	*ntwè*
352	head-pad	ŋgàtà	ŋgàtã	ŋgàtà
561	heap	ißìßì	ìlòòndò, ŋhùùndè	gìlòòndò
391	heap up, ready/set on fire	-kòmèlâ	gòpèèmbá (mòòtõ)= pèèmbá móótõ	gòliŋgíílà
623	hear	-iìgwà	gwìgwã	gùgwà
543	*heart*	*ŋhòlò, mòòyò*	*ŋhòlõ*	*ŋhòlò*
944	hearthstone for putting pots on	ihìgà	ìshìgà/màshìgã	ìsìgà/màsìgà
893	heavy, serious, dull	nditò	-ditò	nditò
705	heel (of foot)	ìshìigínà	ìshìigínà	ìsìgìnà
681	heifer	ndògòòsà	ndògòòsà	ndògòòsà
418	hem, make a border	-pìíndà	gòhìíndà, gòhìíndòlà	gòhìíndà, gòpìíndà, gòtòòlá lòßìímbí
690	hen, fowl, chicken	ŋgòkò	ŋgòkõ	ŋgòkò
766	here	àhà, òkò	àhà	àhà, òkò
863	hiccup	kìisàkàmbòlè	jìsàgámbólé, jìsàkùúmbì	gìsàgàmùlè
800	hide (vt)	-ßìsà	gòßìsã	gòßìsà
38	high, be (of meat)	-ßòlà	gògùùndà	*gòßòlà, gògùùndà*
326	highway	ìpáándà	ìbàlàbălà, ìpàándà	ìpàándà
309	hill	kàálògòlò	lògòlò	lògòlò

No	English	KìmùnàSùkùmà	JinàKìlyâ	GìnàNtùzù
925	hip	lòkùnù	lòkùnŭ	lònòòŋgà
317	hippopotamus	ŋgùβŏ	ŋgùβŏ	ŋgùβŏ
396	hit with a hammer	-kòmàáŋgá	gòkòmă, gòtòlă	gòtòlà ná núúndò
706	hoe	igèèmbè	ìgèèmbè	igèèmbè
990	hold, arrest	-dììmâ	gòdììmâ, gògwàáshâ	gòdììmâ
575	hole, nest	ŋòòβò, ipòónđò	càànjò, ŋòòβò, ìpòónđò	ipòóndò, ichòóŋgò, ŋòòβò
836	hollow out	-bàkóólà, -pòònzà	gòkùùmbà, gòkòòmbá	gòkòòmbá
816	home	kòβiìsè	kàáyà, gòkàáyă	gò kàáyà
654	honey	βòòkĭ	βòòkĭ	βòòkĭ
150	honour	-kòjà	gòkòjă	gòkòjà
797	hook (for pulling down branches in plucking fruit)	ìlòβèló	ŋgwàákò, ŋgóβyò	ŋgwáákò
189	hook (fish)	ìlòβò	ndòβàànŏ	ìlòβò
707	horn, ivory, tusk	mhèèmbè, ìpéémbè	mhèèmbè, ìpèèmbé	mhèmbè, ipéémbè
288	horse *	-	fàláàsà	fàlásà ?
708	house	nùúmbà	nùúmbà	nùúmbà
263	how many?	shìíŋgà	-ŋgà	sííŋgà
572	hump (of hunchback)	lògùkù	lògùkŭ, ìgèèmbè	lògùkù
573	hump (of cow)	lògùkù	lògùkŭ	lògùkù
756	hundred	ìgànà	ìgànà	ìgànà
320	hunger	nzàlà	nzàlà	nzàlà
33	hunt	-gòβyà	gòhwììmâ	gòwììmâ
34	hunter (professional)	ŋgòβyă	ŋhwììmĭ	ŋwììmĭ
35	hunting	βògòβyă	βòhwììmĭ/ gòhwììmâ	gòwììmâ
227	husband	ŋgòòʃì	-gòòʃì	ŋgòósì
808	hut	nùúmbà, ìβàándà	ìβáándà, sòmbĭlìlĭ, sòŋgĕlèlĭ	lòòsŏ
709	hyena	mbìtì	mbìtĭ	mbìtì
1016	I	nèènè	nèènĕ	nèènè

No	English	KìmùnàSùkùmà	JinàKìǐyâ	GìnàNtùzù
1013	idleness, sloth	ßòòlò, ßògòkòlò, ßòtèèßàázù	ßògòkòlò, ßòòlõ wìnògólélwá	ßòlèmèélwá
901	ill (be); groan	-sàátà	gòsàádà, gòlwàálâ	gòsàátà
902	illness, (crippling)	ßòsàátù	ßòsàádǔ	ßòjèchélè
275	imitate	-ìgìlíjà	gwìgèméjà	gòkòòßìlǐjà
16	in front of	kòßòtòòŋgi	nhòòngâ, mbèlè gòßòtòòngí,	hà ßòtòòŋgì
353	in the middle of	hàgàtǐ	hàgàtǐ	hàgàtǐ
118	incite	kòsòkòólà	gòsàmìlâ	gòkòmyà
206	increase, make greater	-òòŋgèjà	góóŋgéjá	gòòŋgèjà
155	increase	-kwìǐlâ, òòŋgèèjà	gòòŋgèjà, -kwìǐlâ	gòkwìǐlâ
426	inheritance	wìiŋgílá, ßògàßǐlè	wìiŋgìjī, ßòlèkèlwà	ßòlèkèlwà
542	inside, in	mùgàtǐ	mùgàtǐ	mùgàtǐ
353a	inside, middle	hàgàtǐ	mùgàtǐ	hàgàtǐ
132	intestines	ßòlà	ßòlà	ßòlà
389	intoxicated (get)	-kòlwà	gòkòlwǎ	gòkòlwà
513	iron ore	shìkólè	còòmă	lòkìlí
264	iron	chòòmà	jìsìnzá, còòmă	chòòmà, gìsǐìnzà, zìǐnzílí
710	island	ìjìíŋgà	ǐjìiŋgâ	ìzìiŋgá
2	itch	-ßàßà	gòßàßă	gòßàßà
460	jammed (become)	-hàáŋgìlâ	gòhàgă, gwìshidá	gòhàgâ, gòhàtà
853	jaw (bone)	ìsàyà	ìsàyǎ, ìhàámbáyó	ìsàyà
960	jealousy	wìísù	wìlǔ	ßòlù
271	journey	lògèèndò	lògèèndò	lògèèndò
606	judge (vt)	-fámúlá	gòyàáŋgólâ, gòlàmùlà	gòlàmùlà, gògálá lòóŋwà
810	jump, leap	-ìtàámbókà	gwìkǐìndíkà	gùkìǐndíkà
477	kidney	mhìgò	mhǐgõ	mhìgò
218	kill	-ßòlàgâ	gòßòlàgâ	gòßòlàgâ
677	king	ntèmì	ntèmǐ	ntèmì
787	kite	fúúŋgwè	fùùŋgwê	ìkòlì

No	English	KìmùnàSùkùmà	JìnàKììyâ	GìnàNtùzù
347	knead	-mààndà	gòlùßà	gòlùßà, gòkàándà
348	knee	ìzwì	ìzwî	ìzwì
427	kneel	-tùjà	gòtùjà, gòsùgàmbâ	gòtùjà
607	knife	lòshò	lòshõ	lòshò
402	knife, thin, curved, broad-bladed	ifyèègèlò ?	ìmòòlèlò	mhòòlò
704	knot	ìgùúndò	ìgùúndò	ìgùúndò
626	*know*	*-mànà*	*gòmànà*	gòmànà
178	lake	nyàánzà	nyàánzà	nyàánzà
151	lame (be)	-tìgìlâ	gògigìlâ	gòtìgìlâ
511	lamp	tàlâ	tàlâ, cèèŋgè	tàlâ
99	land (dry)	sì nyóòmũ	-sĭ	sì nzóòmũ
761	large, great, big *	nhàálè	-tàálè, -kòlõ	-kòlò, ntàálè/nhàálè
94	laugh	-sèkà	gòsègà	gòsèkà
792	lay over on one side	-sùùndà	gwìnìkà, gòpòònjà	kàβàzù
1000	lazy	βògòkòlò	-gòkòlò, -òòlõ gòlèmèèlwà	-lèmèèlwá
699	leaf, blade of grass	ìdòótò, ìswà	ìdòótò/màdòótò	ìdòótò
1025	leaf (tree)	ìdòótò	ìdòótò	ìdòótò
911	leak, ooze out	-zwà	gòzwà	gòzwà
96	lean, bend down, slope	-ìinàmà	gòkùmàmã	gòkùnàmâ
536	lean on, rely on	-sèèndàmìlà	gòsèèndàmìlà, gwìsàŋâ	gòsàkíílwà
796	lean, become; grow thin	-gàándà, -kòòndà	*gòkòòndá*	gòkòòndà
535	leaning (be)	-làálílà	gwìnàmà, gwìyìnámìílà, gòsèndàmà	gòsèèndàmìlà
613	learn	-illàŋgâ	gwìlàáŋgâ, gwìyìígá, gwìyìígílâ	gòlàáŋgà
546	leave, permission	-zùnìlìjà	gòlágwà <gòlágà	gòzùnìlìjìwà
1011	leave over	-sàájâ	gòsàájâ, gòlèkèélà	gòsàájâ

No	English	KìmùnàSùkùmà	JinàKììyá	GìnàNtùzù
547	leave, go away	-ìì̀ŋgà	gwìì̀ŋgà, gùjà, gùβùùkâ	gwìì̀ŋgà
544	leave (off)	-lèkà	gùlèkà	gùlèkà
975	left over, (be); remain over	-shìigâ	gùsàágâ, gwìkàlà	gùsàágâ
310	leg, foot	gùgùlù/màgùlù	gùgùlù/màgùlù	gùgùlù/màgùlù
774	lend, borrow	-gòpà, -bòkà, (làándà)	gùlàándà	gùlàándà
107	leopard	sùβì	sùβì	sùβì
878	lick (vt)	-làámbà	gùlàámbá, gùkòliìnhâ	gùlàámbá
134	lie down	-làálâ	gùlàálâ, gùlàmbàlàlà	gùlàámbàálà
250	lie on one's back	-sàgàlálà	gùsàgàlálà	ságàálì
791	lift up, pick up	-nùùŋgèèjà	βùùcâ, gwìì̀mì̀líkà gùgùùŋgómólà	gùβùùchâ
467	light in weight	mbùùpù	-bùùpù	-bùùpù
304	light, sky	ìgùlù	ìgùlù	ìgùlù
805	lightning	lùlàβì	lùkùβà	βùméme ?
657	lime, whitewash	swàákàlà	fàágálá, swàágálá	ndòβà
213	line, row	lòhì̀lì̀lì̀, βùshòòlè	lòhì̀lì̀lì̀, nsùlùló, βòòlē	βòòlèlé, lògólòòlè
659	line, fishing	βùjì	-	ntègò ?
103	lion	shìimbà	shìimbá	shìimbà
198	lip	nòmò	nòmò/mìlòmò	nòmò
956	listen	-dègèlékà	gùdègèlékà	gùdègèlékà
972	listless (be)	-nèdèkà	gùyògòmà	gùyóóhà
1024	liver	ìtì̀mà	ìtì̀mă	ìtèmà
429	livestock (keep)	-sùgà	gùsàβá	gùsùgà
819	lobster	-	-	-
794	locust	njìgè	njìgè	nzigè
155a	long (become)	-lì̀hà	gùlì̀hà	gùlìipà, gùβìtìlíjà
144	long	ndì̀ìhù	-lì̀hŭ	ndìpù, nìpù
131	look after, care for	-àáŋgàlílà	gùlàŋhánà, gùlàβàdâ, gùlàβíílà	gwàáŋgàlílà

No	English	KìmùnàSùkùmà	JinàKìîyâ	GìnàNtùzù
871	look after grazing cattle, help a sick man on the road	-dîîmà	gòdîîmà, gòlàáŋhánà, gòlàβíîlà	gòdîîmà, gòtòòŋgéélà
354	look at, examine	-lòlà	gòlólà	gòkééŋgéélà
354a	look around	-îlàlàŋgîjà	gwîláláŋgíjà	gòlòléélà
200	look for, hang around (to get something), pursue	-lòòndèèlà, -isòóβîîlà	gòsòòβîîlà, gòsòòmîîlà	gògòòβîîlà
973	loose (be); faint, weak	-dèdà	gòlèβà, gònògòlékà	gònògòlékà
181	lost, get	-jîmîîlà	gòjîmîîlâ	gòzìmîîlâ
1023	louse	ndá	ndă	ndá
769	love, want	-tògwà	gòtògwă, gòhàyà	gòtògwà
934	lung	màbóópò	ìbòópò/màbòópò	gîkùβâ ?
713	magic *	βòlògì	βòlògì	βòlògì
714	maize	îîndégè	îîndégè/màándégè	îîndégè
521	make offerings to the dead	-tàámbîkâ	gògàβà, gògàβîlà, gwîgàβíîlíjà, gòtàámbá	gògàβîlà
226	male	ŋgòóshà	-gòóshà, ìbèhî	ŋhòóshà
10	mamba, green (kind of poisonous snake)	lòdòótò	îβàámbàhîli	sàwàádì ?
793	many	nyîîŋgî	-îîŋgî	niîŋgî
1019	many *	nyîîŋgî	-îîŋgî	niîŋgî
897	marriage	wîîtòòjî	wîtòòji, nhòólâ	βòtòózí
895	marry (of man)	-tòólâ	gòtòólâ	gòtòólâ
896	marry (give in marriage-of parents, priests)	-tòójâ	gòtòójâ	gòtòójâ
814	master	sèèβà	βògòónzŏ	nyàáŋgògò
888	match, harmonise (vi)	-lèèŋgànîjà	gòlèèŋgànîlà	gòlèèŋgànîlà
935	mature	ìkòmèèîîlè	-kómèèzú	gòòsòkâ
596	meat	nyàmà	ɲàmà, nàmà	nyàmà, nàmà
259	medicine, remedy	βògòtà	βògáŋgà, βùgòtâ	βògòtà

No	English	KìmùnàSùkùmà	JinàKìiyâ	GìnàNtùzù
260	medicine (art of medicine man)	ɓòŋàáŋgà, ɓòfùmù	ɓòŋàáŋgà, ɓòfùmù ɓòlàgòji	ɓòlágò
261	medicine-man	ŋgàáŋgà	mfùmũ, ŋgàáŋgà	nàgòzì, ŋgàáŋgà, mfùmù
90	meet	-sàáŋgà	gòsàáŋgà	gòmàànyhâ
861	melt	-áàɓà	gwàáɓà	gwàáɓà, gòbàlàásànà
845	midwife	kàándî	ŋgàáŋgì, myàájá	ŋgòmì
859	migrate, move away	-sàámà	gòsàámà	gòsàámà
1030	milk (n)	màɓèèlê	màɓèèlê	màɓèèlê
20	milk (curdled), curds	màɓèèlê	màlìlòtò, màɓòɓòtò	màɓòɓòtò
19	milk, (fresh) (n)	màɓèèlê	màɓèèlê, màsòòŋgâ	màɓèèlê, màsòòŋgâ
903	millet (bullrush)	ɓòɓélè	ɓòɓĕlè	ɓòɓèlè
290	millipede	ìgòòŋgóli	ìgòòŋgóli	ìgòòŋgóli
73	mix (ingredients, `season food')	-tòɓèkâ	gòsàànjà	gòlòòŋgà
72	mix, put together	-sàànjà	gòsàànjà	gòsàànjàsàànjà
363	monkey (small lightish-coloured)	nhòòmbìlì	nhòòmbílí	nhòòmbílí
362	monkey (colobus- (with long black silk hair, white on shoulders)	-	-	nhòòmbílí
361	monkey (small, dark-coloured)	ŋgòkò	ŋgòkò	ŋgòkò
716	moon	ŋwèèji	ŋwèèjī	ŋwèèzì
609	moonlight	ɓò ŋwèèji	ŋwèèjī	ŋwèèzì óópè
59	mosquito	mbò	mbõ	mbò
436	mother	mààyô	mààyô	iyá, mààyô
65	mould (pottery)	-ɓòòmbà	gòɓòòmbá	gòɓòòmbá
717	mountain	lògòlò	lògòlò	lògòlò
163	mourning	ŋhòòŋgô	ŋhòŋgô	ŋhòòŋgô
1026	mouth	nòmò	nòmò	nòmò
272	movement	lògèèndò	lògèèndò, gàjìtlê	lògèèndò
979	mud, mire	ɓòlòlò	ɓòlòlò, tèèmbê	tèèmbè

No	English	KìmùnàSùkùmà	JìnàKììyâ	GìnàNtùzù
642	mushroom	βòòβà	βòòβà	βòòβà
152	mutilated (be)	-lèmèhálà	gòlèmààlâ	gòlèβà
281	name	lììnà	lììnă	lììnà
539	namely	gìíkì	mmhŏ, nòólŏ	òná
403	nape (of neck)	βòkósì	ŋhòóni	βògósì
256	navel	lòkùùndì	nkùòndì	ŋkùùndì
765	near	hááhò	-bìíhĭ, -hìíhĭ	hihĭ
379	neck	nhìŋgò	nhìŋgó	nhìŋgò
843	need, request	-dàkà	βòtŏgwà, gòhàyà βòlòombí, ŋhòòmbó	gòdàkà
962	new	mhyà, -pyà	-pyă, mhyă	mhyà, -pyà
718	night	βòjìkò	βòjikŏ	βòzìkò
755	nine	kèèndà	kèèndă	kèèndà
484	nose	lyòólò	lyòólŏ, nìíndó	lyòólò
211	number	ŋhàáŋgàlà	gòβàlà ?	gìβàlò
237	oar	ŋgàhì	ndìínhó	ìβùgìlô
939	obstruct	-lèmèjà	gòcìβă, gòcàámâ	gòjìjà
48	offspring	βòβyìílè	ŋwàánà	ŋwàánà
66	oil (from plants)	màgùtà	βònàlâ, màgùtă	βògòòndò ?
435	oil	màgùtà	màgùtă	màgùtà
818	old times, the past	kàlè	kàlè	kàlè
411	old person	nàámhàlà, ŋgìkòlò	nàámhàlă (m) ŋgìkólŏ (f)	nàámhàlà, ŋgìkòlò
410	old	ŋhòlòkólò	-kòlòkólò	ŋhòlòkólò
214	one-eyed (being)	sòòŋgò	sòòŋgó	sòòŋgò
440	one	ìmô	-ìmô	ìmô
590	open mouth wide	-ààsàmâ	gwàásàmâ	gwàásàmâ
984	open	-lùgòlà, -kùùndólâ	gòlùgòlà	gòlùgòlà
829	open (set ajar) a door	-lùgòlà	gòlùgòlà, gòtòjà	gòtòjà

No	English	KìmùnàSùkùmà	JìnàKììyâ	GìnàNtùzú
876	order, direct	-làgɨjà	gòlàgɨjà	gòtòmɨjâ
961	ostrich	nòòŋgù	nòòŋgú	nòòŋgù
640	our(s) pl. 1st person)	yìisè	(y)iisĕ	iswè
506	out (go), go away	-ɨ̀ŋgà	gwɨ̀ŋgà, gòfùmā	gwɨ̀ŋgà
324	outside	hàànzè	-hàànzĕ	hàànzè
217	overcome; win, vanquish	-tìindà	gòkìindá, gòhèèβà	gòkìindà
995	owed by, be	-tòòndwà	gòtòòndwá < gòtòòndá	gòtòòndwà
835	oyster	-	-	-
207	pack (luggage)	-tùùŋgɨ̀lâ	gòtùùŋgányâ	gòtùùŋgà
208	pack, press together	-sòòŋgèlà	gòsògà, gòshìdànyâ	gòkàándɨ̀kíjà, gòshìindɨ̀lâ
456	pack, flock, group	ìdàálè	ɨ̀dàálĕ/màdàálĕ, ɨ̀βìtâ/mbìitâ/màβìtâ	iβìitâ
457	pack, bale, bundle (n)	ilòβótà ?	ntùùmbá/mìtùùmbá	isùlúsì ?
236	paddle (n) *	ŋgàhì	ndɨ̀ɨ̀nhó	ndɨ̀ɨ̀ŋhò
342	palate	ìlàáŋgò	ɨ̀làáŋgó	ilàáŋgó
9	palm (date)	ntèndè	ntèndè	ntèèndè
719	palm-wine	-	-	wàálwà
257	palm (of hand)	shìgàánzà	jìgàánzà	gɨ̀gàánzà
6	palm (raphia)	-	?	-
7	palm (borassus)	ìhàmà	nghàmà/mìhàmà	-
8	palm (oil)	nchìkíchì	?	-
459	palpitate, flutter, tremble	-zùgùmà	gòtìníínhâ, gòdètèmà, gòzùgùmà	gòdètèmà
47	parent, s/he who begets	myàájɨ̀	myàájɨ̀/βàβyàájɨ̀	myàázɨ̀
720	parrot	kàsùkû	-	-
232	pass, surpass	-βɨ̀tà	gòβɨ̀tà, gòkɨ̀là,	gòβɨ̀tà
325	path	nzɨ̀là	nzɨ̀là	nzɨ̀là
159	pay	-lɨ̀pà	gòlɨ̀pà	gòlɨ̀pà
600	pay attention, take care	-lòlà	gòlàβíílà, gòlòlà gòlàáŋhánà	gòtègèlèjà

No	English	KìmùnàSùkùmà	JinàKìîyâ	GìnàNtùzù
820	peel, shell	-yògòlà, -tòòndòòlâ	gòpàlă, gòkùùβòlà, gòtòòndólâ	gòtòòndòòlâ
12	peg	mbàgò	?mbàgò	mààmbò
11	pegs (tent)	lòmààmbò/mààmbò	lòmààmbò/mààmbò	mààmbò
494	penetrate	-nwèèlâ	gòshèèbà	gwìlŋgîlâ
721	penis	lòβòlò	ndòòsõ?, mbòlò	gìsòòŋgò
884	penknife, lancet	kàgèèmbè	lòshõ	lòshò ló βógóòndè
558	person	mùùnhò	mùùnhò	mùùnhò
638	pestle	ŋwìîsî	ŋwìîsî	ŋwìsî
312	pig	nhòòmbà	ŋgùlùβè, nhòòmbá	nhòòmbă
414	pigeon, kind of	mhùúndà	ŋhùúndà	ŋhèélè
579	pile up, pile loads on head	-βiliŋgílà	gwìdìîkâ, gòtòlíílà	gòtòlíílà
479	pinch, make narrow	-shìnà, -jòòŋgà	gòshìnà	gòsìnà
357	pipe (tobacco)	lòsèkè, ìsèkè	lòsègĕ	lòsèkè
552	pit, hole	ichòóŋgò	ĭcòóŋgò, ŋòòβò, ìpòóndò	ichòóŋgò
974	place, put (vt)	-tòòlâ	gòtòòlâ, gòdìtìlâ	gòtòòlâ
722	place (n)	hàànhò	hàànhò, hàlèβĕ, lwàándĕ	hàànhò
892	place of the dead	kòlìmù	gòlìmũ	gò βàchì
225	plait	-shìβà, -sùkà	gòtòkà, gòshìβà	gòshìβà
932	plant, sow	-hààmbà	gòhààmbà	gòhààmbà
510	platform	lòtáàli	lòtàlă	hìtàlè, lòtàlà
834	please, satisfy (vt)	-yèjà	gòlòòmbyà, gòpòjă gòtògiìshâ, gòtòjă gwîgòtyâ, gòyèjă	gòsùjà
93	pleased (be)	-yèjìwà	gòtògwă, gòyègă	gòyèjìwâ, gòtògìshìwà
13	plot of ground	lògàáŋgà, lòβòògâ	ìbàálà	lòβòògâ
647	plunder (a town)	-nyègètèjà, -tèmà	gòsòónzà	gòdìimâ
1014	plunge into, cause to sink	-nwèèjâ	gòlìβìjâ	gònwèèjâ
114	poke	-sòòsèlà	gòsòòsèlà	gòsòòsèlà

No	English	KìmùnàSùkùmà	JinàKììyâ	GìnàNtùzù
737	pole, thin	lòßáàlè	lògìtò/ŋgìtò	lògìtò
111	polish, clean by rubbing	-kùlùùsà	gòpàlă, gòtèlèlèjà, gòtèlèjà, gòkòlà, gòkiliishà	gòkòòndòòlâ
177	pool, pond	ilààmbò	ílàmbó, ítàβà	ilààmbò
923	porcupine	nòòŋgò	nòòŋgŏ	nòòŋgò
374	porridge (stiff)	βògàlì	βògàlì	βògàlì
42	pot (metal)	ìgóbò	ìgŏbò	ìgóbò
41	pot, vessel	shìsèmè	jìsèmè	sìsèmè
39	pot, mug	ŋkéβè	ŋkèβê/mìkèβê	ŋkéβè
40	pot, cooking (earthen)	nùúŋgò	nùúŋgò	nùúŋgò
749	potato (sweet)	nòòmbò	nòòmbò, màándóólŏ	nòòmbò
646	potter's kiln	ìchòmèlò	ìtìmìlò	lyáánì
369	pound (grain in a mortar to get off the husks)	-twààŋgà	gòpòòlâ	gòpòòlâ, gòtwààŋgà
441	pour away	-ìità	gwìtà	gùtà
641	pour	-sààmyà	gwìtà, gòsààmyà, gòpùmúúnhâ, gòdìtìlâ	gòsààmìlìjà
748	pregnancy	ndà, ŋhùùmbì, βòdìtò	ndà	ndà
636	pregnant, be	kòβì ndà/βòdìtò; kòβì ŋhùùmbí	gòβìizâ ndà gwìtà ndâ <gòìitã ndà	gòβìizá ndà
599	prepare	-βèèjâ	gògòlã, gògòlàŋã, gòβèèjáβèèjà	gòmàìtìlà
553	press out (oil seed, sugar cane)	-kèmèkâ	gòkàmă, gòtìlnà	gòtwìlnà
986	produce, put forth, display	-fùnyà	gòfùŋă, gòòlècâ	gòsùnyà
909	prominent (be); put out	-ìifùnyà	gòpùùnâ, gòfùmă, gwìgèlâ	gòsèèsà
518	pronounce	-hàm(ù)kà	gòhàyà, gòyòòmbà	gòhàyà
340	protect by charm (medicine)	-kàgà	gòkàgă	gòkàgà
947	protect by charms (target)	-kàgà	gòkàgà	gòkàgà
475	puff-adder	shìpìlî	jìpìlî	gìpìlî

No	English	KìmùnàSùkùmà	JinàKììyâ	GìnàNtùzù
244	pull	-dùtà	gòdùtà, gògwèèsà	gògwèèsà
173	pull up, come to a halt	-ìǐmà	gwìǐmă, gwǐmíílà	gwìǐmà
172	pull up, root up	-dùbòlà	gòdùbòlà	gòdùbòlà
833	pull, drag	-gwèèsà, -dùtà	gòdùtà	gògwèèsà
57	pump	ìβóómbà	ìβômbà	ŋgòkà
548	push	-shìindìkâ	gòshìindíkâ	gòsìindìkâ
992	put, place, set	-tòòlâ	gòtòòlâ, gòβìǐcâ	gòtòòlâ
887	put together for comparison	-hèlà	gòlèèŋgànìjà	gòlèŋgànìjà
969	put a pot on the fire	-tègà	gòtègă	gòtòòlâ (fùgò)
981	put together, compose	-tùùŋgà	gòlòòŋgà, gòβèèjâ gòtòòŋgá, gòtùùŋgá	gòtùùndà
862	python	sàtò, ndèlèmà	sàdŏ	sàtò
656	quarrel (vi)	-lwà	gòyògă, gwǐkèŋâ	gòkènyà
180	quench, extinguish	-jìmyà	gòjìmyă	gòzìmyà
485	quiet (be)	-lèèndà	gòfùlìkâ, gòlèmbèèlà gòhùùmólà	gùlèèndà
76	rain	mbùlà	mbùlă	mbùlà
917	rain (vi)	-tòlà mbùlà	gòtòlă mbùlă	gòtòlá mbùlà
1006	rains, the lesser	ìswààlàálà	gàfààlálà, gàswààlálà	màyààyì
197	rainy season	kìdìkò	jìdìkŏ	gìdìkò
580	rumble	-ìidúúsìlà ?	gòlùùndùmà	gòdùdùmà, gòlùmà
26	rat, kind of	ŋgòsò	-	sùná
488	rat (field)	ŋgòsò	-	ŋgòsò
24	rat	ŋgòsò	ŋgòsò	mbèβà
25	rat- (very large, long-tailed)	ŋgòsò	-	sèènzì
883	razor	lògèèmbè	lògèèmbè	lògèèmbè
949	read	-sòmà	gòsòmà	gòsòmà
1007	reap, harvest	-gèsà, -yòβà	gògèsà, gòbùkóólà, gòkùlà, gòyòβà	gògèsà, gòyòβà, gòsǐǐmbà, gòkùlà

No	English	KìmùnàSùkùmà	JinàKìǐyâ	GìnàNtùzù
523	receive	-àànùkòlà	gwàànùkòlà, gòbòkèèlà	gwànùkòlà, gòbòkèèlà
537	reed	màdètè	ìdètě/màdètě	màdètè
632	refuse, say no	-lèmà	gòlèmà	gòlèmà
633	reject, refuse, dislike	-gìlà	gòlèmà, gòlèmèjà	gòlèmà
545	remain, stay behind *	-sààgâ	gòsààgâ, gwǐkàlà	gòsààgâ
1035	remain, stay	-ikàlà	gòsààgâ, gwǐkàlà	gòsààgâ
840	remember	-ìizòkà	gwǐzòkà	gùzòkà
499	resemble *	-ìikòlà	gwǐkòlá	gùkòlá
879	resemble (very closely)	-iyìikòlà	gwǐkòlá	gùkòlá
1031	resemble *	-ìikòlà	gwǐkòlá	gùkòlá
149	rest heavily on, be burdensome	-dìdòhèlwà	gòlèmèèlà, gòβùnă, gòhèèβà	gòβùnwà
964	rest the cheek on the hand (in brooding mood)	-pǐǐnǐhàlà, -sùùndùhálà	gwǐtòlí tàmă < gwǐtòlá ítàmă < gòǐtòlá ǐtàmă	gòtòlà βòháβǐ
957	rest, take a holiday	-ìfúúlà	gwǐfúùlà	gùfùùlà
249	return, go back	-shòòkà	gòshòògà	gòshòòkà
1004	return	-shòòkà	gòshòògà	gòshòòkà nùmà
500	revive	-jòòchà	gòpìmbúúcâ, gòjòòcà	gòjòòchà
318	rhinoceros	mhèlà	mhèlă	mhèlà
988	rib	lòβàzù	lòβàzù/mbàzù	lòβàzù
473	ripe	shìhíílè	-pìilé	-pìilè
996	ripen (vi) *	-hyà	gòpyă	gòpyà
472	ripen (vi)	-hyà	gòpyă/gòpìà	gòpyà
209	river	mòóŋgò	mòóŋgò	mòóŋgò
239	roar, rumble	-hìlìmà	gòlùùndùmà, gòŋòòlâ, gòlùmà, gòhìlìmà	gòŋòòlâ
644	roast	-kàlàáŋgâ, -òòmìchâ	gòòcà, gòkòmèlâ	gòòchà
350	roast (in/by fire)	-chòmà	gòòcà	gòòchà
806	rock	shìgàáŋgà	jìgàŋgá, ǐtàlě	ìtàlè

No	English	KìmùnàSùkùmà	JìnàKìlyâ	GìnàNtùzù
291	rooster (cock)	ŋhùùŋgùlùmè	ŋhùùŋgúlúmé	gòŋgólìgóóŋgò, ŋhùùŋgùlùmè
169	root	ŋjì	nzwì/mìzwì	nzì
29	rotten	ìβòlilè	-βòzǔ, -βǐ	-βòzù
1012	round (be)	-ìkòònzéélà	gwìβìlííŋgâ, gwìlìiŋgá	gùlìiŋgà
183	round (go), turn round	-gàlòkà, -gàlòchà	gòlìiŋgá, gòjiiŋgá, gwìyòŋgóójà	gòchìβà
999	round, become	-ìkòònzéélà	gwìβìlìiŋgâ	gòtùùŋgà
110	rub	-kùlùùsà	gòshìiŋgà, gògùùsà	gòkòlà
50a	rubbish, garbage	βòsósò, màpàlàlà	màpàlàlà	màkàmbàlàlà
321	rubbish heap	ìchòóŋgò	ìkàándìlò	màkàmbàlàlà
826	run	-pèèlà	gòpèèlà	gòpèèlà
522	sacrifice	shìtàámbò	jìgàβìlò, jìtàámbò	ŋhòjà
723	salt	mùùnhù	mùùnhǔ	mùùnhú
95	sand	màsénì	sàáŋgàsàáŋgà, màsălò	sàáŋgàsàáŋgà
630	satiated (be); have enough to eat or drink	-ìgòtà	gwìgòtâ	gùgòtâ
788	satisfy	-ìigèjà	gwìgòtyâ, gòlòòmbyà	gòsùjà
251	say to, tell to	-wìlìâ	gòwìlìâ	gòwìlìâ
783	scorpion	ŋhòmì	ŋhòmǐ	ŋhòmì
453	scrape	-pàlà, -kwàálà	gòpàlă	gòpòònzà
855	scrape, grate	-kwàálà	gòpàlă	gòkòlòòsà
856	scratch, grate *	-shìnà	gòshìnà, gòkwáálà	gòsìnà
668	scythe, sickle	ìmòòlèlò	mòòlò, ìmòòlèlò	mhòòlò
84	search for	-chòòlà	gòcòòlà, gòkòòβà, gòcòòβà	gòkòòβà
85	search diligently	-kùlà	gòkùlà	gòkùlà
738	seat, stool, chair	isùùmbì, shìtì ?	ìsùùmbí	ìsùùmbí
770	see	-βònà	gòβònă	gòβònà
67	seed	mbìyò, mbègù ?	mbìyŏ	mbìyò
404	seize	-dìimâ	gòdìimâ	gòdìimâ
611	self	-ènèkèlè	-enìkílí	-èènèkèlè

No	English	KìmùnàSùkùmà	JinàKǐìyâ	GìnàNtùzù
302	sell	-gòjà	gòjiìnjá	gòjiìnjà
570	send	-tòmà	gòtòmǎ, gòcààlâ	gòtòmà
451	separate, set apart	-lékàànyà	gòlékàànyà	gòlékàànyà
450	separate, leave each other	-lékàànà	gòlékàànà	gòlékàànà
534	set a trap	-tègà	gòtègǎ	gòtègà
868	set (of the sun)	-gwà lìlìmì	gògwà, gòliβǐlâ, gòsàlàlǐlà, gòlòkǎ	gògwà, gùlà
971	settled (be); be in good order	-léèndà	gòtèèŋgánílà	gòβèégélèjà
754	seven	mpùùŋgátǐ	mpùùŋgátǐ	mpùùŋgátǐ
1033	sew *	-sùmà	gòsùmǎ	gòsònà
589	sew	-sùmà	gòsùmǎ	gòsònà
135	sexual intercourse with (have)	-tòòmbà, -ìtòòmbâ	gwǐtòmbâ, gwílààlâ	gùlààlâ, gùtòòmbâ
691	shadow, shade	mbèhò	ŋwèŋgéèjì, mbèhò	mbèhò
867	shame, disgrace	mìnàlà	sònǐ	gùgòòkà
116	shame	sònì	sònǐ	mìnàlà
724	shame, modesty	mìnàlà	sònǐ, mìnàlâ	mìnàlà
386	sharp (be)	-òògìhâ, -kàlìhâ	gòògìhâ, gòkàlìhâ	gòkàlìhâ
920	sharpen	-nòòlà	gònòòlà	gònòòlà
915	shave	-mòògà	gòmòògà	gòmòògà
603	she, he	wèèì	wèèí	wèèí
287	sheep	ŋhòlò	ŋhòlò	ŋhòlò
1009	shell, cowrie	shìimbì	shìimbǐ	shìimbì
822	shell	-	ìògàlàtà, ìòdèlèkà	gìlòòŋgò
725	shield	ìòmòòdà	ìòŋòòdà	ìòŋòòdà
712	shin (bone)	nòòndì	nòòndí	nòòndì
968	shiver, shudder *	-zùgùmà	gòdètèmà, gònigìnà	gòfùlàmâ
528	shiver	-zùgùmà	gòdètèmà	gòdètèmà
434	short	ŋgùhì	-gùhǐ	ŋgùhì
430	shoulder, tip of	ìβègà	ìβègà/màβègà	ìβègà

No	English	KìmùnàSùkùmà	JìnàKììyâ	GìnàNtùzù
588	shoulder	ìβègà	ìβègà	ìβègà
839	shout	-hàmùkâ	gòyògă, gòyògàɲâ	gwàànììlà
946	shrivelled (be); wrinkled	-ììtà mìinyà	gòɲààlà, gwìhòbá, gwìɳùlúdâ	gwììtà síízòkòlò
763	sick	-sàátù	-sààdŭ	-sàátù
870	sift	-yòòŋgà	gòyòòŋgà	gòyòòŋgà
615	sing	-ìĭmbà	gwìĭmbă	gwìĭmbà
3	singe	-βàβà	gòβàβà	gòβàβà
980	sink, be drowned	-tùβìlà	gòliβìlâ, gònwèèlâ	gòŋwà nhúli
170	sink	-nwèèlâ	gòliβìlâ	gòliβìlâ
726	sister (his)/ (her) brother	ilòòmbò	ìlòmbòóyè	ilòòmbò
627	sit	-ikàlà	gwìgààshà	gògììshâ
753	six	ìtàándàtò	ìtăndàtŏ	ìtàándàtò
785	size, measure	-	nshìmŏ, ŋgèlĕ	ŋgèlèkèlò
123	skin (of person)	ikòβà, ndìlì	ìkòβă, ndìlĭ	ikòònzà, ndìlì
124	skin/rind (of fruit)	lyòólà, ìgòóŋgwà, ìgàándà, ìgòólà	ìgŏlà, ìkùlŭlù, ìkòòlĕlè	ìgòólà
303	sky	ìlùùndè	ìgòlò, ìlùùndè	ìlùùndè, ìgòlò
865	slander, accuse falsely, often secretly	-sààyìlà	gòsòònèlèjà, gòβòòlâ	gòβòòlà
470	slap	-tòlà ípì	gòpààlà	gòpààlà, gòtòlà ípì
970	slash	-tèmà, -fèègà ?	gòsèèŋgà, gòtèmă	gòswèèkà ?
220	slaughter	-sìĭnzà	gòsìĭnzá	gòsìĭnzà
727	slave, bond servant	nsèsè	nsèsè, mfŭgwà	nsèsè
728	slave (female)	nsùgwà	nsèsè, mfŭgwà	nsèsè
729	slave, (male)	nsùgwà	nsèsè, mfŭgwà	nsèsè
136	sleep (vi)	-tìindìlà	gòlààlâ	gòshììtòlà
731	sleep (n)	-tòlò	tòlŏ	tòlò
730	sleeping-place, accommodation	ndààlô	ndààlô > gòlààlâ	ndààlô

No	English	KìmùnàSùkùmà	JìnàKììyâ	GìnàNtùzù
967	slip, be slippery	-chòòlòlòkà	gòcòòjà, gòtyòòjà, gòcòòlòlòkà, gòtèlèlà	gòtyòòjà
1021	small	ndò	-dólòlò, -dòó	ndólòlò, ndò
332	smallpox	yìînà, ndòßî	ndòßî	ndòßî
241	smell (sweet) (vi)	ŋwààsò (n)	gònùùŋhà	gònùùŋhìîlà
242	smell (bad, of fish) (n)	ßònùùŋhù, kòßùgùtà ?	ìsõ, ßònùùŋhũ	gònùùŋhà
240	smell (bad) (vi)	-nùùŋhà	gònùùŋhà	gònùùŋhà
629	smoke (n)	lyòòchi	lyòòcĩ, gòbèhã (vt)	lyòòchi
428	smoke (give out) (vi)	-zùùkîîlà	gòzùùkà	gòzùùkà
387	snail, slug	ŋgòòkù, nòòŋgà	ŋgòòkũ, jìgòòkũ	ŋgòòkù
837	snail	ŋgòòkù, nòòŋgà	ŋgòòkũ	ŋgòòkù
145	snake, serpent	nzòkà	nzòkã	nzòká
158	snare, trap (n)	ntègò	ntègô	ntègó
864	sneeze	-ityààmúlà, ityààmùchà	gwîtyààmúlà	gùtyààmúlà
924	sniff, smell out	-nùùnyhà	gòbèhã, gònùùŋhà	gònùùnyhà
296	snore, snort	-hòlòòtà	gòŋòòlâ	gòŋòòlâ
69	soil	ßòlìíndò	ßòlòóŋhó	ßòlòóŋgò
732	song	lyìîmbò	lyìîmbõ	lyìîmbò
616	songs *	mìîmbò	lyìîmbõ	mìîmbò
36	soot	milàgè, njijò, mbilò	mbilõ/ŋhilĩ/màkìlĩ, milàgè	mbilò/màßilò
195	sorcerer	nògì	nògì	nògì
201	sore	nhòòndò	ìlòòndà	ìlòòndà
734	soul, spirit	ŋhòòlò, mòòyò	ŋhòlõ	ŋhòló
331	sound, cry	ìlàkà	ìlàkã	ŋwàànò
64	space (open)	lòßòògâ	lòßòògâ, ìbààlà	hààpè
82	spark	ìsàsî	ìsàsî	isàsè/màsàsî
253	speak	-yòòmbà	gòyòòmbà	gòlòòŋgàlóóŋgà, gòhàyà
733	spear (n)	ìchìmù	ìcìmũ	ìchìmù
137	spend time	-hòòyà, jìmîjà màkàànzà	gòhòòyà	gòßìtyà mákàànzà

No	English	KìmùnàSùkùmà	JinàKìlyâ	GìnàNtùzù
1038	sperm, semen	wiinê	wînê	βùnê
62	spider	lòβòβì	ìtàándálá, lòòβì	lòlèèndà
182	spirit (of dead person)	liŋhàáŋgî	ìsàámvà	ntàálè/βàtàálè
464	spirit (disembodied)	ìsàámvà [isàámŋvà]	mìjìmũ, ìsàámvà, ìhògi	ìsàámvà/màsàámvà
683	spirit (evil)	ìsàámvà [ìsàámŋvà]	ìsàámvà ìkàlî	màámvà àà βóβì
582	spit	-swà	gòfà/gòfùà	gòswà
533	spittle	màtè	màtẽ	màtè
601	split, crack (vt)	-βèlà	gòpàándòlà	gòpàándòlà
951	spoil, blind (vt)	-βòkùjà	gòbòkùjà	gòβòkùjà
649	spoil (a child)	-gègèlà, -lèèndèèjâ	gògègèlà	gògègèlà
998	spoil	-βiihyâ	gòβìipâ, gòkènàágòkà	gòβìipyâ
813	spoon	ndìînhò	ndìînhó	ndìînhó
5	spot, speckle	màβàlà	ìβàlã, ìbàdõ	ìβàlà, ìdòònhẽ
959a	sprain an ankle	-tèlèŋhànyà	gòkàlàβánìkà	gòtìiŋgòlâ
141	spread out (be)	-sàámbàálâ	gòsàánjà	gòmàlàmàlà
527	spread	-àámbà	gwàánzà, gwàámbà, gwàálà	gwàámbà
908	spread abroad, be; become generally known	-sàánjà, -kùmòòkà	gòkùmòòkâ	gòkùmòòkâ
592	spread, smear on	-βilà	gòβilã, gòtòβà, gòshíìgà	gòβilà
591	spread, scatter (vi)	-sàámbàálâ	gòsàámbáálâ gòbàlàásànà gòsàlàáŋhánà	gòlèkàánà
880	spring (of water)	shinyélè	lòzèlèélà, lwînzî lókòlõ < lwînzî ginèlè lòkòlõ	
965	spring, machine	màshíinè	màshînê	gìtòmàmílò
866	spy out	-dètà mátò	gògìsílìjà	gòβòògílìjà
849	squat (on the haunches)	-itòòndà	gwìtòòndá	gùtòòndà

No	English	KìmùnàSùkùmà	JinàKììyâ	GìnàNtùzù
991	squeeze oneself up against a wall (e.g. to allow another to pass)	-ìsùùndâ	gwìgìgíníkà, gwìshìdélèjà	gùgègèbékà
914	squeeze out	-twiìnà	gòkámă	gòkàándá
343	squeeze, milk	-shèèmhâ	gòshèèmâ	gòshèèmâ
102	squirrel	-	gàβùùndì	gàβùùndì
562	stack, pile up	-sòòmbyà	gòlòòndà, gòtòlíílà	gòtòlíílà
1029	stand (vi)	-ìmíílà	gwìmă, gwìmíílà	gwìmíílà
735	star	sòòndà	sòòndă	sòòndà
390	stare, glare	-βyòòlà	gòβyòòlà, gòβùùndòlà	gòmògòlâ miìsò
202	start off, send away	-pèèjà	gwìnjà	gwìnjà
799	startle, catch unawares	-kùùŋgà, -sàáŋgánìjà	gòkàáŋgá	gwìsàmbókìjà
830	startle, jerk	-gùtòlâ	gòkáŋgá	gwìsàmbókìjà
618	steal	-iìβà	gwìβă	gùβà
266	steel	chòòmà	-	chòòmá ŋgàŋhá
554	stem (of maize, millet, etc.)	iβèlélè	ìβèlèlé/màβèlèlé/ mbèlèlé	iβèlélè
825	step over	-ìtàámbókà	gòkílă, gòkílàŋhâ, gòtàámbòkà	gòkílàányhâ
315	sterile man (or woman)	ŋgòòmbà	ŋgòòmbà	ŋgòòmbà
541	stick	nàáŋgà	nàáŋhà	nàáŋhà
74	stir, mix by stirring	-lùβyà	gòsàgàjà, gòbùgùsâ	gòbùgùsâ
850	stir	-lùβyà	gòsàgàjà	gòsàgàjà
78	stir up	-tèèjâ ?	gòβùlùcâ, gòkòmyà	gòlùmyà
61	stone	iwè	ìwè (pl. màwè)	iwè/màwè
228	store up, collect	-sòòmbyà	gòsòòmbyà, gòlòòndà gòβìliìŋgâ, gòtòlíílà	gòβìliìŋgâ
154	straight (make)	-gòlòlòchà	gògòlòòlà	gògòlòòlà
268	stranger, guest	ŋgènì	ŋgènì	ŋgènì
661	stream, current	ìkòòndò	lòóŋgà, ŋhòòmò	nùlúmà

No	English	KìmùnàSùkùmà	JinàKìì̀yâ	GìnàNtùzù
798	strength, power	ŋgùzὺ	ŋgùzὺ	ŋgùzὺ
140	stretch oneself	-ìgòlóòlà	gwìgòlòòlà	gùgòlóólà
395	strike, knock	-gùùdíjà	gòtòlã, gògùùdíjà	gògùùdíjà
982	strike with a spear	-chìmà	gòcìmà	gòchìmà
282	string (n)	βòjì	βòlòβà	βòjì
487	strip off (e.g. grains of corn)	-yògòlà	gòhòlòlà, gòyògòlà	gòyògòlà
519	strut proudly	-ììsànyâ	gwìhàjá, gwìhàyâ, gwìgìì̀mbã gwìgéétà	gùsànyà
407	stumble	-igùùmhà	gwìpàmá, gwìgùùmhá	gògùùmhá
997	stunted (be); be spoilt	-gèèdèlà	gòβìipâ	gòβìipílwà
948	stutter	-hyàhyátìjà	gòhàhádìjà	gòhàhátíjà
594	suck (the breast)	-òòŋhà	gòòŋhã	gòòŋhà
480	suck (vt)	-bìpà	gòbipã, gòòŋhà	gòbìpà
912	suffer, bear patiently	-ìgùmílìjà	gwìyòòmílíjà	gòyòmìlíjà
802	sugar cane	màgúwà	ìgũwà	ìgùùwà
333	sun, light	lìì̀mi	lìì̀mĩ, lyòòβă	lìì̀mì
184	surround	-ìyòòŋgóólà	gòpìndìì̀là, gògòβà	gòpìì̀ndìì̀là
438	swallow	-mìlà	gòmìlà	gòmìlà
777	swear	-ìilàhílà, -ìihàákìì̀là	gwìlàhílà	gùtòòŋgà, gùlàhílà
905	sweat	lòòyìlô	lòòyìlõ, lìídùùtû	lìidùùtû
392	sweep up, collect in a heap (rubbish)	-kùmìì̀ŋgâ	gòpyàágólà, gòsòòmbyá	gòkùmìì̀ŋgâ
943	sweep	-hyàágólà	gòpyàágólà	gòshàágólà
517	sweet, pleasant	-nònù	-nònũ	-nònù
51	swell	-βìimbà	gùβìimbá	gòβìimbà
608	sword (short)	lòshò	lòshõ	lòshò
933	sword	ipááŋgà	lòshõ	pááŋgà
360	tail	ŋkì̀là	ŋkì̀là	ŋkì̀là
875	take leave of	-làgà	gòlàgà	gòlàgà

No	English	KìmùnàSùkùmà	JinàKìiyâ	GìnàNtùzù
778	take in (from rain, etc.)	-ùòβà	gòòβà	gòòβà
565	take, carry	-βòòchâ	gòsòlà	gòβòòchâ
233	take off (clothes), undress	-zùùlâ	gòzùùlâ	gòzùùlâ
530	tangle	-yàànjiwá	gòtàβà, gòtàβàɲà	gòzwàànjà
898	taste (v)	-lòjà	gòlòjà	gògèmà
985	teach, instruct	-làáŋgà	gòlàáŋgà, gòhèèmbékâ	gòlàáŋgà
621	tears	shiisòjî	jiisójî	miisòzî
412	ten	ìkòmì	ìkòmì	ìkòmì
121	termite	nswà/mìswà	nswà/mìswà, mfâ/mìfâ	nswà/mìswà
739	testicle	màkìindà ?	lòβòlò/mbòlò lòβògòlò/mbògòlò	mbòlò
1020	that	ìyò	ìyò	-yò, -chò, -βò
455	thatched roof	ìβiimbìlè	jìsòòŋzò	ìβiimbìlè
767	there	àhò, òkò	àhò, òkò	àhò, òkò
54	they	βòòì	βòòyí, βò	βòòì
444	thick, fat	ŋgìnù	-gìnǔ, -nònǔ	-gìnù
86	thicket *	ìsákà/màsákà	ìsăgà	ìsákà/màsákà
854	thicket	kàsákà	ìsăgà	ìsákà
619	thief	ŋwiìβì	ŋwìβì, ŋwiìβì	ŋùβi
23	thigh (of human)	ìtàáŋgò	ìtàáŋgó	ìtàáŋgò
22	thigh (of animal)	gòlòòmbò	jilòòmbò/ìtàáŋgó	ìtàáŋgò
559	thing	shiìnhò	gìinhò, jikòlò	gìinhò
987	think, imagine	-iigànìkà	gwìgànìkà	gùdètà
651	thirst	nòòtâ	nòòtâ	nòòtâ
740	thorn	liihwà	liifà	liiswà
689	threaten	-kàáŋgà	gòkàáŋgá	gòògòhyâ
532	three	ìdàtò	ìdàtó	ìdàtó
115	thrust into	-chìmà	gòcìmà, gòsòmà	gòchìmà
420	tick (cattle or dog)	ŋhùùndyà	ŋhùùndyǎ	ŋhùùndyà

No	English	KìmùnàSùkùmà	JìnàKìǐyâ	GìnàNtùzù
1034	tie (fasten) (vt)	-dèènyâ	gòtùùŋgá	gòtùùŋgà
258	tie up	-tùùŋgà	gòtùùŋgá	gòtùùŋgà
978	tingle with excitement	-yègà	gwìgìlímòlà	gùtà nààmbâ
119	tip, point	βòsòòŋgè	nènò, βòsòònjĕ	mhèlò
741	tobacco	ìtùùmbàtì	ìtùùmbátí	ìtùùmbàtì
146	today	lèèlò	lèèlō	lèèlò
742	toe	lwààlà	βònòònò, lwààlā	lwààlà
445	tomato	ìnyáànyà/mànyáànyà	nyánya	ìtòlè/màtòlè
105	tomcat (half-wild)	kìmbòlô	kǐǐmbòlō	kǐǐmbòlô
743	tomorrow	ntòòndò	ntòòndó	ntòòndò
166	tongue	ɬòlǐmì/ndǐmì	lòlǐmī	ɬòlǐmì/ndǐmì
120	tooth (canine), tooth filed to a point	liìnò	-	ìwìǐmílò
267	tooth	liìnò	liìnō/mìnō	liìnò/mìinò
306	top, peak	ŋgèlèlò	ìgōlyà	hìigólyà
293	tortoise	mhùlù	gùlùmààdì	gùùmààdì
277	town	njíínì	kààyǎ	màdʊ̀ʊ́kà ?
378	tramp of feet	ntìindò	ŋkìindó	ŋkìindó
270	travel	-yèèlâ	gòyèèlâ, gòjà/gòjìà	gòjà lògèèndò
540	tree	lǐínti	ntī	lǐínti
538	tremble, shake (vi)	-dètèmà	gòdètèmà	gòdètèmà
566	trickle away	-zwà	gòtìinâ, gòsòlòlókà	gòzwà
401	trunk (of elephant)	ŋkòòndò	ŋkòòndò	ŋkòòndò
604	try	-gèmà	gògèmà	gògèmà
605	tsetse-fly	ìbʊ̀bʊ̀lʊ̀	ŋòŋòlò, ŋgī	bʊ́bʊ́lʊ́
938	turn upside down, turn over	-gàlòchà	gòsìnòlâ, gòhììndòlà, gògàlòcà, gògàlòlà	gòkùùndìkâ
174	turn round	-pìǐndʊ̀ʊ̀là	gòpìǐndìlìjà, gòpìlìmyà gwìyʊ̀ʊ̀ŋgʊ́ʊ́jà, gòpìlòlà	gùyʊ̀ʊ̀ŋgʊ́ʊ́jà

No	English	KìmùnàSùkùmà	JinàKìiyâ	GìnàNtùzù
711	tusk, elephant's (middle size) *	mhèèmbè	liinõ, ìpèèmbé	liinò, mhèèmbè
452	twin	màβàsà	ìβàsã/màβàsã	màβàsà
185	twist roll, spin with fingers	-dòsà	gòdòsã, bòtà	gòdòsà
483	twist, esp strands	-sòβyà	gùbòtã	gòlìiŋgàlíiŋgà
752	two	-βìlì	ìβìlí	ìβìlí
18	udder	shìnènà	jinènà	ginènà
945	uncover, reveal	-kùùndòlâ	gòfùnòlà, gòkùùndólâ	gòkùnòlà
551	unripe, half grown	itìindì	ìtìndì, -βìsì	ndòβèjà
994	unripe, uncooked	iβìsì	-βìsì	-βìsì
311	up, above	hìgólyà	hìgõlyà	hiigólyà
614	upright	wìimâ	wìimâ	wìimâ
446	urinate/defecate	-nyà, -sùβààlà	gòsùβààlà, gònyà gòtùùndàgà,	gònyà, gòtùùndàgà
745	urine	miinè	mìnĕ	miinè
569	use	-tòmìlâ	gòtòmàmílà	gòtòmàmílà
307	utmost, highest point	ŋhàlìkíjò	jisòònzò	βòkàlìkíjò
904	vapour, gas	myòòyì, lyòòchì	myòòyĭ, myòòyĕ	ŋòòyòóyò
380	vein	ŋwàànji	ŋwàànjĭ	ŋwàànzì
276	village	chààlò	ìgòòŋgóli, cààlò	gìjíji ?
692	virgin (bride), girl	ŋwààlòkì	ŋwìβèémbù	ŋwààníkì
327	vision	shìlòòti	jilòòtí	gìlòòtí
330	voice, (thunder)	nùùndùmò	ìlàkă	ìlàkà
224	vomit	-lòkà	gòlòkă	gòlòká
524	walk (take a)	-simìinzâ	gòsimìzâ, gòyèèlâ	gòsimiinzâ
269a	walk	-jà	gòsimìzâ	gòjà
847	wall	ndùgù	ndùgù	ìsèèŋgè
983	want, need, wish	-iikànwà, ìikòòmvà, -dàkà	gòhàyà	gòdàkà, gùkòòmvá
507	war	βòlògò	βòlògõ	βòlògò
790	wart-hog	ŋgìlì	ŋgìlì	ŋgìlì

No	English	KìmùnàSùkùmà	JinàKìlyâ	GìnàNtùzù
860	wash oneself (after evacuating)	-ìishéénèènhà	gwìpyààgólà, gòshèènèènà	gòshààgólà, gòshèènèènà
127	wash (hands)	-òòjà	gòòjă, gòkàlàβâ	gòkàlàβâ
128	wash (clothes)	-fùlà	gòtòlă, gòkànzá	gòkàànzá ŋgóβô
129	wash, take a bath	-òògà	gòògă	gòògà
322	water	mìinzì	mììnzĭ	miinzí
959	wave, let off a trap, remove a spell	-sòβòòlà	gòkàgòòlà, gòlògòòlà	gòzìmyà
1017	we	βìisè	(y)ìisĕ	βisé
1010	weak	βòdèdù	-gòkòlò, -lèβŭ	-nènèèlâ
881	wean a child, give leave, send away	-gijà	gòlècà, gòbìishâ	gògijà, gòbùùshâ
234	wear, dress	-zwààlà	gòzùàlâ/gòzwààlâ	gòzwààlâ
501	weave, knit	-sùmà	gòfùmă, gòsùmă	gòshònà
1015	weight, rhythm	βòdìtò	βòdìtò	βòdìtò
210	well	lwìinzì	lwììnzĭ	lwiinzì
56	wet (get)	-lòβà	gòdòtà, gòβòòmbà, gòlòβà	gòdòtà
919	what?	kí	kíí/kíí(y)ì/kíì?	kííyì
469	which?	ndókì	-ĭlì	ílíhè
192	whistling	shìlòjì, nòjì	nòlĭ	nùlí
175	white man	nzúŋgù/βàzúŋgù	nzùúŋgù	-òòpè
610	white	-ààpè	-ĭĭlō, -pé	-ààpè
918	who?	náání	nàànĭ/náàní?	òyàlí(hè)
28	wicked	-àà βòβì	-βĭ	-àà βòβì
339	wife	ŋkìímà	ŋkĕ	ŋkè
187	wind up (thread)	liiŋgà	gòliiŋgá	gòliiŋgà
746	wind	lòyàgà	lòyàgă	lòyàgà
937	winnow	-hèhà, -èèlà	gòhèhă, gòbèètâ, gwèèlà	gwèèlà
112	wipe	-hyààgólà	gòpyààgólà	gòshààgólà
88	wire (brass)	βòdóódì ?, wáàyà ?	ìtèndèlè/matèndèlè	βòzì βò chúómà

No	English	KìmùnàSùkùmà	JinàKììyâ	GìnàNtùzù
194	witchcraft	βòlògì	βòlògi	βòlògì
279a	withhold from	-gòβà	gwìmà	gùmà
279	withhold from, abstain	-βisìlâ	gwìlècâ <gòlèkà	gùlèchâ, gwiyiimá
338	woman	ŋkǐímà	ŋkǐmà	ŋkǐímà
747	womb	ndà, ŋhùùmbǐ	ndà, ŋhùùmbǐ	ŋhùùmbǐ
812	word	mhàyò/mìhàyò	mhàyò	mhàyò
772	work as a mason	-zèèŋgà	gòzèèŋgà	gòzèèŋgà
167	work (n)	nìmò/milìmò	nìmò/ milìmò	nìmò/milìmò
81	wrap up	-liiŋgá	gùgòòndà, gòliiŋgá	gòliiŋgă
344	wring (clothes)	-kàmà, -bigisâ	gòkàmă	gòkàmá
773	yawn	-iiyàhyòlâ	gwààyòlâ	gwààyòlâ
593	year	ŋwààkà	ŋwààkă	ŋwààkà
750	yesterday	ìgòlò	ìgòlò	ìgòlò
15	you (sing.)	βèèβè	βèeβě	βèèβè
1018	you (pl.)	βiiŋwè	(y)iiŋwě	βiiŋwè
715	young man	nyàándà	ɲàándà	nyàándà
637	your(s) (pl. 2nd) person)	yiiŋwè	(y)iíŋwè	iiŋwè
693	youth	nsòòmbà, mùùnyhà	nsòòmbà, ŋwàànīkǐ	ŋwààlòkì
292	zebra	ndòólò	ndòólò	ndòólò

Appendix 1. Zone F word-list: F31

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
133	abdomen, stomach, belly	ndà	ndàà	ndà
495	abscess, boil	pyó	pyóó/màpyóó	ìpùtè/màpùtè
786a	abundant/abound	pà, pò	mííŋgì	ìdó
786	abundant	pà, pò	póó	ntènyâ

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
571	abuse, insult	kòtókànà	kòtókìlà	kòtòkílànà
252	abuse, reproach	kòkòtàkìlà	kòlágànìlà	kòlèà
809	accustomed (get)	kòjìílà	kòkìjìílà	kìzòólà
274	act (vt)	kòjìpyà	kòtèéndà	kìtòmà
229	add up	kòyóóŋgèélyà	kòyóŋgèélyà	kòhàŋgìlìŋkànyà
927	adjacent (be); border (vi)	kòyíímbìŋxànà	kòkímìímbìílà	mìímbì (n)
662	adze, carpenter's	nsèsò	nsèésò	nsèésò
254	affair	lòkáánì/ŋâáánì	lòkáánì	lɔ̀kànì
1002	afraid (be)	kòyóópòkà	kòyóópòkà	kògópà
168	agriculture	lyìmà	kìlímò	kìlìmò
926	all	swè, túlwè	swéè	ìhí
248	alter, change	kòkàìlà	kòkàìlà	kòkàìlà
595	animal	nímù	nímù	m(ù)nyàmà ?
617	answer a call	kòyítìkà	kòyíítìkà	kìítíkà
782	answer, reply	kòshòòkéélyà	kòshòòkéélyà	kòjìbù ?
664	ant (reddish-brown biting)	nèlèli	nèlèli	nyèèli
122	ant-hill	kìgòlò	ànìŋéŋò	kìgòlò
663	ant (small)	jùúndwì	nsɔ̀ŋgòì	mùtwà
586	anvil	tyàánìlò	túlìlò	mwàándà
989	apply by stretching, spread over	kòkómà	kòkómà	kògóólà
976	appoint, set up	-	kòyíímìkyà	-
55	arm, hand	mòkónò	mòkónò	mòxònò
771	armpit	ŋkwáápà	mpyèègènè	kìsùkósùkò
203	arrange, put in order	kòpááŋgà	kòpááŋgà	kòpàáŋgà
204	arrange, put right, repair	kòjìpìílyà	kòzìpyà	kòzìpyà
478	arrive	kòpìkà	kòpìkà	kòpìkà
665	arrow	nsòòŋgà	nsòòŋgà	mòyì
666	arrow (head of); spear head	-	nsòòŋgè	ndìlìmà

No	English	KĭnàUshòòlà	KĭníLàámbà Central	KĭnìHàánzù
337	ashes	màû	màú	màù
199	ask for	kùlóómpà	kùlóómpà	kùlòòmpà
89	assemble, collect (vt)	-	ilĭŋgĭĭlà	kòhàŋgòĭlà
789	aunt (father's sister)	sééŋgì	nòkòkólò	màámâ
148	avoid, dodge	kùshúgà	kùtyèègà	kĭhéjà
688	awe, fear of God	kùkólyà, kùlyóómpà	wítèkèlì	kòlóómpà
667	axe	mpóópò	mpòópò	ihèèŋgò
364	baboon, ape	mpóómà	mpóómà	mpòmâ
634	back of (at the)	nùmà	nùmà	kònyùmà
297	back	mùgòòŋgò	mùgòòŋgò	mùgòòŋgò
297a	backbone	ŋkòmé yà mùgòòŋgò	ŋkòmé yà mùgòòŋgò	mùgòòŋgò
27	bad	mbí	mbí	ibì
37	bad (become), rotten (vi)	kùyòlà	kùyòlà	kòòlà
87	bait	-	kĭtégèlò	lòdyà
398	banana (plant)	múgòómbà ?	mùdìzì ?	mùgóómbà ?
397	banana (fruit)	ndìzì ?	ndìzì ?	ndìzì ?
399	banana (for cooking)	-	-	mùzùzû
1005	baobab	mwàándò	mwàándò	mwàándô
1022	bark (of tree)	-	gyóè	ìgáámbà
313	barren (of living being)	mùgòòmbà	ŋgòòmbà	mùgóómbà
314	barren (of land)	bámbàsì	óómù	ìjáŋgwà ?
376	base of tree-trunk	shííŋkwì	tínà/màtínà	ìtìnà/màtìnà
650	bask (in the sun), warm oneself	kùyóótà	kùyóótà	kòtà
576	basket of open wicker-work	kìgááŋgè	kìsòònzò	kìsèmè ?
577	basket (plaited)	kĭkápò	kĭìyò	kĭkápò
643	bathe	kùyóógà	kùyòògà	kògà
498	be fitting, behove	ìjípìĭlè	kĭjípìĭlè	ifàìlè ?
1	be, become	kùtúlà	kòtúlà	kòtòlâ

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàànzù
955	beach, coast, shore	mpwáání	mpwáánì	mpwánî
827	bead(s)	nsááŋgà	nsááŋgà	ihàŋgà
416	bean, kind of bean (from *Phaseolus vulgaris*)	ŋkúúndè	ŋkóónde	ŋkùùndè
417	bean, small (from bean plant)	máhàlàgè	máhàlàgè	màhàlàgè
844	bean (runner)	ŋkúúndè	ndúúlì	ŋkùùndè
1037	bear child	kùlèlà	kòlèlà	kòtùgà
147	beard	ndèlù	ndèlù	ndèlù
768	beat	kòkúà	kòkóà	kòkóà
759	beautiful	iizá	mùúzà	nzàà
162	bed	kítàándà, òlîlì	òlîlì	òlîlî
161	bedstead	òlîlì	òlîlì	òlîlî
653	bee	nzókì	nzókì	nzòkì
775	beer	ntólò	ntólò	ntòlî
497	befit, suit	kòkijîpîlà	kòkíjîpîlà	kòzîpîlà
101	below, underneath	pàànsí	nsílîlî	pihî
186	bend, twist (vi)	kòkígòòndà	kònyóŋgòtòlyà	kìkòònzà, kòpîîndà
468	bend (vt)	kògòòndà	kòpéétà	kòkòònzà
193	bewitch	kòlògà	kòlògà	kòlògà
930	bifurcation, cross-roads	misàámbí yà nzîlà	ntáágànîlyò	miisàámbwá nzîlà
222	bile	ntóóndò	ntóóndò	nyòòŋgò
262	bind up, splice	kòkílîkà	kòyòmbèkèèlà	kòkilíkwà
658	bird-lime	òntíà	òntíà	lònèèmbô
811	bird	nòní	nòní	nyònyì
46	birth (give), to a child	kùlèlà	kòlèlà	kîtùŋgóilè
125	bite	kòlúmà	kòlúmà	kòlùmà
221	bitter	òsóóŋgò	ŋxálî	ndòkò
223	bladder	-	-	-
482	blind person	mùpókù	mùpòkù	mpòkù

No	English	KìnàUshòòlà	KìníLàámbà Central	KìníHàánzù
669	blood	mìgàlî	mìgàlí	nsàkàmì
496	blow on, blow up	kòpéémbèèlà	kòpéémbèélà	kòpèèmbéélà
238	blow bellows	kòlùgùtà	-	kòpèèmbéélà
463	blow away	kòpéémbà	kòpùpùtyà	kòlùmyà
776	boast, brag, praise oneself	kòkìsánìà	kòkísàmàádyà	kìkòzà, kikòlyà
676	boat	-	-	màshúà ?
670	body	mwìlì/mìlì	mwìlì/myìlì	mwìlì/mìlì
581	boil up	kòpòkòtà	kòpùùtà	kòtòkòtà
30	boil (vt)	kòtélèkà, kòpyóópyà	kòpyóópyà	kòpyòpyà
433	bone	kúpà	kyúpà	ikúpà
564	bore a hole	kòbósòlà	kòpósòlà	kòtòbólà
1008	born (be)	kùlèlwà	kòlèlwà	kòtùgwá
910	borrow	kùkòpà	kòkyòpà	kòkòpà
872	bottle	nsúópá	nsópà	nsópà
928	boundary	mfímbì	mfímbì	mìmbì/mìmbì
671	bow, bending	òótà	òkòtú	òtà
508	bow	òótà	òòtá	òtà
953	bowstring	-	lòlígì	lòdìgì
58	brain	òòŋkô	òòŋkô	òòŋgwè
509	branch	lòtáámbì	lòtáámbì	ìtámbì
375	bread	mùkáátè ?	múkàátè ?	mùkàtè ?
831	break wind *	kòshùlà	kòsùlà	kòhùlà
77	break, snap	kòúnà	kòúnà	kòùnáŋgà
1036	break wind	kòshùlà	kòsùlà	kòhùlà
17	breast (of a woman)	mbélélé	mbélèlè	ìyèèlê
489	breath, breathing	mwáàò	mwáàù	mihùpó
490	breathe, rest	kùshùùpà	kòsùùpà	kòhùpà
138	bridge	dàlàjâ	tiiŋgitiiŋgì ?	ìdàlájà ?

No	English	KìnàUshòòlà	KìniLààmbà Central	KìnìHàànzù
139	bridge (wooden)	-	lyàlò	kìpùtìlò
885	bring, fetch	kùléétà	kòléétà	kòlèètâ
171	bring to light	kòkúmòòlà	kùlòòŋgyà	kìgèlyà
882	bring up (a child)	kòkólyà	kòkólyà	kòlèlà
660	brook, stream	kàmóóŋgò	mwáápò	mòòŋgò
942	broom	kyòòyò	kyòòyò	ùpyàgìò
113	broth	mùsòòlî	mùsòòlí	mòhòlì
381	brother-in-law, sister-in-law	mùlámwî (màlè), sháámbà (fèmàlè)	mùlámòwî	mùnyàŋkòmbánê
341	brother (older)	mùgólì	mùnùnà	mùkòlò
673	brother, relative, fellow-tribesman	mòntówà	mòntówà	áhèù, tóótì, àlùnà
874	bruise badly, take the skin off	kòkwàámòòlà	kòŋwèètòlà	kipónòlà
71	buffalo	mbòògō	mbògó	mbògò
807	build	kòjèèŋgà	kòzèèŋgà	kòzèèŋgà
674	bull	nzágàámbà	nzágàámbà	nzàgàámbà
80	bunch (of hair)	-	pyópî	nsiiŋgà
890	burden, load	mùlígò	mùlígò	mùligò
645	burn (vt & vi)	kòyáákìlà	kòyákìlà	kàkílà
231	burnt (become)	kòpíà	kòpyá	kòpyà
179	bury	kòyfíkà	kòyfíkà	kòìkâ
555	bush	sàkâ	òòwí	ìhàkà
21	buttermilk	mbòòtò	màsòóŋgà ?	màkwàsò
514	buttocks	tákò/màtákò	tyákò//màtákò	òkùnò/ŋkùnò
301	buy	kògòlà	kògòlà	kògòlà
873	calabash	kfíndì, kìsààò	kfíndì	shìíndì, yìíndì
857	calf of the leg	nsàkù	-	-
877	calf	ndàámá	ndàámá	ŋòŋóómbè
31	call	kòyfítà	kòyfítà	kitááŋgà

No	English	KìnàUshòòlà	KìníLàámbà Central	KìníHàánzù
675	canoe (dug-out)	-	pyàáŋgò	ŋgàláwà ?
602	canoe	-	byɪ̀ɪ̀nɪ̀	mìtúúmbì ?
993	carry a child on the back (in a blanket)	kòpàápà	kòpàápà	kòkèèŋkà
567	carry/lift on to head (take up) a heavy load	kòtwííkà	kùkítwɪ̀ɪ̀kà	kɪtɪ́ɪ́kà
97	carry astride on the hip	kòkólèèlà	kòpyàápɪ̀ɪ̀lyà	kòkwàlíílà
560	carry, take	kòshólà	kòsólà	kòhólà
578	carry, convey	kòkèèŋkà	kòkèèŋgà	kòkèèŋkà
104	cat	nyááú	níááù, zááŋgò	nyàû
286	cattle	mìtúgò	mìtúgò	mìtùgò
486	cease, finish	kòshílà	kòsílà	kòmálà
526	centipede	ŋgɪ̀ yà òtyáánà	ngì yà mùtyáánà	nhàándò
247	change, turn round	kòpɪ̀lòkà	kòpɪ̀lòkà	kòpɪ̀lòkà
334	charcoal	kyálà/màkálà	kyálà/màkálà	mùkàlà
963	charm (esp. to ensure wife's fidelity) (n)	nsàámbà	mpɪ́gɪ̀	-
32	chase (away)	kòyɪ̀ɪ̀ŋgà	kòyɪ̀ɪ̀ŋgà	kòhàmílà
515	cheek	kùùndà	kyòòndà	ìkùùndà
92	cheerful (become)	kòshógòkàáŋgà	kòkénòkà	kòhógòkà
106	cheetah	-	nsyà ?	ihòì
585	chest	kɪ̀kúwà	kɪ̀kúà	kɪ̀kúà
672	chest (of animals and birds)	kɪ̀kúwà	kyókòòmbè	kìdàlɪ́
431	chief, headman	mòtémì	mútémì	mùmbòì, mànáŋgwà
431a	chief	mòtémì	mútémì	mùtèmì, mùmbòì
679	child, infant	mwàánà	mwáánà	ŋwàànà, mùŋènyà
597	child, offspring	mwàánà	mwáánà	ŋwàànà
886	chin	kìdèlù	kìdèlù	kìdèlú
83	choose	kùshàágòlà	kòsàágòlà	kòsàágòlà

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
109	civet cat	-	nílìlì	ìséénsè
255	clan	lóólì	ndògô	ndògô
841	climb, ascend	kònááŋkìlà	kònááŋkìlà	kònàáŋhílà
550	clod, lump	gííndì	òòmbà	ìkìíndì
851	close (the eyes, mouth, etc.)	kùtùtyà, kùmùmà	kòtùtyà, kòmùmà	kòtìtyà, kòmùmyà
299	cloth	kítàámbàlà	mwééndà	kìtàámbàlà
235	clothe	kòjáályà	kòjáályà	kòtùgályà
300	clothes, material	ntíílà	ntíílà	ŋgùò ?
305	cloud	lùùndè/màlùùndè	lùùndè	ilùùndè
817	coagulate	kògónà	kògàándà	kògàándà
941	cobra (spitting)	mwíílù	mwìílò	mìlô
906	cohabit	-	kòkíìŋílìlà	kìíŋgílànà
465	cold	mpépò	mpépò	mpèpò
624	come	kòíízà	kòíízà	kìzà
505	come on suddenly, take in the act	kògwìílà òshìíshà/òláándì	kòyáágànìlìlyà	kòwàámbà ìláándì
230	construct, put together	kòjèèŋgà	kòyòòndà	kòzìpyà
471	cook	kùlúgà	kùlúgà	kòlùgà
557	cook in water or fat	kòtélèkà	kòtélèkà	kòtòkòtyà
43	cooking pan, small	kìkàlááŋgò	nsùpùlíà ?	kìkàlááŋgìlò
385	cool (become); get well	kòpólà	kòkámyà	kòpòlà, kòkòmyà
265	copper, brass	-	shàbá	shàbà
283	copy a pattern	kùlúlyà	kòlàìlìlà	kòshàtíílà
894	cork, stopper	líímbì	lyíímbì	kìkùníkìlò
52	corpse, carcass	mùlímbà	mùlímbà	mùzógà ?
1001	corpse (human)	mùlímbà	mùlímbà	mùlmbá
383	cough (vi)	kòkólòlà	kòkólòlà	kòkòhólà
4	count	kòyàlyà	kòyàlyà	kòàlyà
100	country (our)	nsí yìítò	nsí	ìhítù, ìhì (ítù)

No	English	KĭnàUshòòlà	KĭníLàámbà Central	KĭnìHàánzù
14	courtyard	kĭyáánzà	kĭyáánzà	kĭsàlĭ
852	cover (up)	kòkúnĭkĭlà	kòkùnĭkĭlà	kòkùnĭkĭlà
285	cow	ŋòòmbè	ŋòòmbè	ŋòòmbè
1003	coward	mwòóà	mwòóà	mwòóá
335	crab	ŋgègèlégèégè	-	ŋkáà
520	crawl, creep	-	kòyáágùlà	kàágúúlà
612	cricket	jénzèlè	-	ŋgàgâ
153	cripple	mùlémà	mùnàkĭtèlè	mòlèmà/àlèmà
803	crocodile	-	máámbà ?	-
319	cross (a river)	kòpùùtà	kòpùùtà	kòpùtà
846	crow (n)	ŋkóóŋgòlò	ŋkòòŋgòlò	ŋhòŋgólò
308	crown of the head	nsàànsĭ	nsàànsĭ	nsàánsì
79	crumple	-	kòlĭndĭkàlĭĭndĭkà	kòkònzákòònzà
370	crush by pounding, pulverize	kòtúlàáŋgà	kòsòkólà	kòpòòndà, kòtwàáŋgà
393	crust	ŋkókò	kyókò	lòkòkò
160	cry, wail	kòlĭlà	kòlĭlà	kòlĭlà
966	cucumber, small	gòógò	kyóólì/àkyóólì	gòògò/àgòògò
736	cudgel	kipínì	gyóóŋgò	kidùùŋhúlì
165	cultivate	kòlĭmà	kòlĭmà	kòlĭmà
950	cure, cool, heal	kòpólyà	kòpónìà	kòpòlyá, kòpòlísà
355	cut	kòtémà	kòtémà	kòtèmáŋgà
98	cut, lop	-	kòpógòlà	kòtèmáŋgà
117	cut to shape, sharpen to a point	kònòòlà	kòsèèsà	kòpàlà
365	dance (of men, to show courage)	kòínà	-	kòìnà
53	dance	kòínà ŋgòmà	kòínà ŋgòmà	kòìnà
622	dark, black	nzílò	nzílò	ndwàálò
481	darkness	wíílò	wíílò	kìtì
824	dawn (vi)	kòyéélà	kòyéélà	wèlà

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
359	dawn, daybreak	gìɪŋgô	gìɪŋgò, kìgìɪŋgó	kòtòlóká
744	day after tomorrow	jíílì	gyòlò lyâ	pàshàólà
130	day	lòtóóndò	lòtóóndò	lòhikò
682	day-time	múúnsì	mónsì	mòŋwé
869	day (all)	múúnsì pìí	mónsì pìí	mòŋwé wìhī
751	day before yesterday	jòólì	jòòli	ìzòlì
423	dead person	mùkíù	mòkî	mòlímílì
424	death	ŋkíà	ŋkíà	kòshà
931	decorate	kwìyóógèélyà	kògòmòlà	kòpàámbà
446a	defecate	kànìà	kònìà	kòmìà
631	denial	kòkáánà	òsíítì	kòhìítà
821	deny	kòkáánà	kòkíkànà	kòhìítà
648	destroy, spoil	kòyónòónà	kòyónòónà	kògàzànjà
437	dew	lòsólòlì	lòsólòli	lòòmì
219	die (cause to); put to death *	kòyólàgà	kòyólàgà	kòòlágà
1027	die *	kòkíà	kòkíà	kòshà
425	die	kòkíà	kòkíà	kòshà
504	dig up, dig out	kòshɪ̀mbòòlà	kòsíímbòòlà	kòtùhòòlà
503	dig	kòshɪ̀ɪmbà	kòsɪ̀ɪmbà	kòhɪ̀ɪmbà
466	diminish, grow less	kòkéépà	kòkéépà	kòpòŋgólà
635	dip	kòtòèlyà	kòtòélyà	kìnà
49	dirt	òsháfù ?	òdòbû	òsháfù ?
680	district, province, country	nsí	nsì	kìsàlī
245	divide	kwìyómòlànìà	kòyómòlànìà	kògàlànà
512	divorce	kòkílèkà, tàláká	kòkílèká	kìlékà
367	do, complete, finish	kòmàlà	kòmàlâ	kòmàlà
366	do	kòtèèndà	kòkítòmà	kìtòmà
60	dog	mbúà	mbúá	mbwà

No	English	KìnàUshòòlà	KìníLàámbà Central	KìníHàánzù
292a	donkey	ndògwí	ndògóì	ndògwè
685	door	mùlàáŋgò	lwìì̀gì	mùlàáŋgò
415	dove (red-eyed)	ŋkòòlô	nzìà	ŋkòòndà
188	doze	kòtííndìilà	kòtííndìlà	kòtìindílà
529	draw water (from well)	kòtépèèlà máázì	kòtépèèlà máázì	kòtèpéélà màzì
215	dream (vt, vi)	kòlyóótà	kòlòòtà	kòlòòtà
328	dream (n)	ndóóti	lòlóóti	ndòtí
448	drink	kòkòpà	kòkòpà	kòŋwà
196	drizzle	màsisilâ	màsisìlà	màsisílà
780	drop, throw down	kòkàlà	kòkónòòntà	kòxàlà
284	drum	ŋgòmà	ŋgòmà	ŋgòmà
598	dry (vt), set out to dry	kòyánìkìlà	kòómyà	kánîkà
346	dry	nóómù	nómù	lòmù
954	dry up, ebb	kòpwéélà	kòpòá	kòhìlà
345	dry up, become dry	kòyóómà	kòómà	kòòmà
289	duck	mbàátà/mbàátà	mbàátà	mbátà
243	dust, cloud of dust	lòŋkòòndì	lòŋkòòndì	lòŋkòndì
628	dwell	kòkìkàlà	kòkyálà, kòdíílà	kìkìhì
492	eagerness, zeal	-	òyàgà	púpà ?
491	eagle, bird of prey	nàándâ	nàándà	ndì
563	ear	kòtóì	kìtóì	kòtwì
70	earth, land	nsí	nsì	pihì
44	earthenware vessel for serving up food	nòóŋgò	yòòŋgò	nyòòŋgò
156	eat	kòlyâ	kòlyà	kòlyà
900	effort, exertion	kòkàmàtíkà	kòkàmàtìkà	ŋgùlù
273	egg	gì/màgì	gyì	ìjiè/màjiè
443	eight	mònáánà	mònáánà	mùnànà
705a	elbow	kìŋkókòòlà	kìntígìnò	kìŋkòkóólà

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
329	elephant	nzògù	nzògù	nzògù
336	embers	kyàlà/màkálà	kyálà/màkálà	ìxàlà
842	embrace	kòkúmbàsìlà	kòpùùŋgàtìlà	kòkùmbàsílà
394	end (come to an)	kùpélà	kòpèlà	kòlèxà
952	escape, recover	kòpónà	kòkámyà	kòxòmyà
899	examine, measure, test	kògèmèlà	kògèmà	kòpìímà
45	excrement, dung	màbî	mài	màbì
958	exorcise, drive out a devil	kòpólyà	-	kògàáŋgìlà
784	explain	kwîlòòndyà	kòkènèèntyà	kìtàámbólyà
620	eye	liisò/miisò	liísò/míísò	liihó/miihò
828	eyebrow	kòòmbò	ŋkòmbò	ŋkòpè/ŋkòpì (pl)
838	eyelash	kígì	ŋkígì	ŋkòpì
587	face downwards	óùndàálá	kòùndàálà	kùùndáálà
686	face	ósió	òsiò	òsò
940	fade, disappear	kòlímìílà	-límìílà	kòlímílà
891	faint, lose consciousness	kwìyólòkà	kògáálà	kòzímílà
298	fall	kògwà	kògwà	kògwà
549	fall short	kòkéépà	kòkèèpà	kòpùŋgólà
462	fan, wave	kòpéémbèèlà	kòpèpèlà	kòpèpélà
764	far	kòlî	kòlî	kòlî
921	fat (be) (of animals)	kògînà	kògînà	kògînà
922	fat (of animals)	ŋgînû	nónú	gìnílè
531a	father	dáàdà	tàtá	tàátâ
382	father-in-law, mother-in-law	mòkwí	mòkóì	mùkwîìŋgwâ
531	father (my)	dáàdà wàánè	tàtá wàánâ	tàátà
687	fear	óówà	òóà	wóóà, kògópà
652	feathers, fur	màùlì	màùli	nzòyà
848	fence, enclosure	lókèkèélà	lókòtò	lòxòtò

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
858	ferment, turn sour	kòkálìpà, kògáàsâ	kògáàsà	kògáàsà
762	few (a), not much	ŋkéèi	ŋkéèi	ŋhèéhò
757	fierce, sharp	mùkálì, mùtàkì	nzógì	ntáki
421	fig-tree	-	mùlááŋgálì ?	-
422	fig-mulberry tree	mòkóò	mùkóò	mùxóyô
216	fight	kòkíkkòà	kòkíkòà	kkìkkòwà
804	fill	kòkíjòlyà	kòkíjòlyà	kòzólyà
176	fill a hole, stop up	kòlìimbyà	tìnìtìlà	kòzibà ?
583	filter, strain	kòshòòzà, kòyòòŋgyà	kòshòòzà	kòkàmà
50	filth	mpàlàlà	màlàgàlà	mpààlà
516	final, decisive	mpélò	mpélò	pàámpèlò
760	fine, excellent	kìlzâ	nzìlzâ	bàhò, nzà sáánà?
447	finger	lwáálà	lwáálà	nzàlà, ògáánzà
323	fingernail	kúlùkùlù	lòkúlùkùlù	lòkùlókòlò
474	fire	móótò	mòótò	mòótò
280	fireplace, hearth, kitchen	hà òlúgìlò, jìíkò ?	kòmàpígwà	liìkò
970a	firewood (collect, cut) (vt)	kòtyéénà ŋkóì	kòtéénà ŋkói	kòtènyà ŋkwì
413	firewood	ŋkóì	ŋkói	lòkwì, ŋwì
191	fish up, pull out	kòlòpòà	nimólà	kòbùà
126	fish (old Swahili *nswi*)	nsàmáki ?	nsìí	nsíì
190	fish (vt), trap fish	kòjùà	kòzùà	kòbùà
400	fist	ŋgùmì ?	ŋkùùndi	ŋgúmì ?
525	five	tàánò	kàtàánò	ìtàánò
493	flap wings wildly, flutter	-	kòkípùnùùntà	kòtènéntà
832	flatulence	kòìímbìílwà	kòtólyà	kòindíílwà
384	flavoured (be properly)	kòkólèlà	kòkólèlà	kòxòélà
907	flower	lyóóà ?	yóà ?	iúà ?
278	fly (house)	nsàgì	nsàgì	nsàgì

No	English	KĩnàUshòòlà	KĩníLàámbà Central	KĩnìHàánzù
1028	fly (vi)	kòpùpùtà	kòpùpùtà	kòpùtà, kòlùmà
1032	foam *	póómbòlù	pyómbòlù	ìpòmbòòlù
502	foam	póómbòlù	pyómbòlù	ìpòmbòòlù
143	follow (in order)	kòlòòndèèlà	kòtyáátĩĩlà	kòshàtà
142	follow	kòlòòndèèlà	kòtyáátà	kòshàtĩĩlà
823	food supply for a journey	mpàámbà	mpékè	mpéké
556	forest	shàkâ	òòwî	ihákà
584	forge	kòtyáánà	kòtyáánà	kòtyánâ
889	forget	kòyííwà	kòyííwà	kĩĩwà
458	fork, bifurcation	pyáándà/màpàándà	pyáándà/ màpàándà	ìpàndà
442	four	kánfí	kànfì	iìnê
295	frog	ntòòndô	ntòòndô	nhòòndò
574	fruit	ŋkàlî	ŋkàlî	ìtúúndà ?
349	fry	kòkálàáŋgà	kòkàlàáŋgà	kòkàlááŋgà
936	fully developed, be	kòkólà	kòlilòkà	kòxòlà
625	full (become)	kòkíjòlà	kòkíjòlà	kìzólà
316	garden	nsóózà	nsóózà	bùsitáánì ?
419	gather (flowers, fruit)	kòkyàlà	kòkàlà	kòxàlà
91	gathered (be), assembled (be)	kòkílòòndĩĩlà	kòkílòòndĩĩlà	kìlíŋgĩĩlà
368	gazelle (Grant's)	láálà	láálà	mpàlà ?
454	gazelle, small (impala)	mpàlâ	mpàlà	mpàlà
108	genet (kind of speckled civet cat)	ntùùŋgò	nsàkáálà	ntùùŋgò
408	get, obtain	kwìlígìà	kòlígyà	kòlìjà
684	ghost, sudden apparition	múntùúŋgâ	sĩímwì/màsĩímwì	mìnhúúŋgà
568	giraffe	ntwĩĩgà	ntwĩĩgà	ntwĩgà
246	give away (present)	kòpúnìà	kòpúnìà	kòpùmyà
449	give	kòpéélà	kòpéélà	kòpùnyà, kòpà
916	give light to	kòmìlìkà	kòmìlìkà	kòmòlìkà

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
815	glide, trickle	kòshámàámbà	kòsámàámbà	kòlàgàlà
269	go	kùyééndà	kòlóóŋgòlà	kòlòŋgòlà
639	go in, come in, enter	kòyííŋgìlà	kùíŋgìlà	kìiŋgílà
63	goat	mbóli	mbóli	mbòli
694	goat, (he-)	ŋgòlàáti	mpáái	ŋgùlàti
695	god	nzóà	nzóà	itùùndà
758	good	mùùzâ	mùkééndè	nzìzà
388	goshawk (East African) (*Astur tachiro*)	nsáánsì ?	kìsàmwègà	ndî
68	grain (of cereal)	-	mbéù	-
696	grandfather	kòókò	kòókò	isékòlò
697	grandmother	màámà	nòkòkólò	màámâ
432	grasp, hold in arm	kòkúúmbàsà	kòkùùmbàsà	kòkùmbásìlà
698	grass, reeds	màsáánsì	màsáánsì	màfà
406	grate	kòkwàámòòlà	kòŋwèètòlà	kìkwálà
409	great, powerful, big	-kólò	ŋkólò	ŋkòlò
164	grief, sorrow	òkíà	òkìà	màsìgò
371	grind (grain with a millstone)	kòshìà	kòshíà	kòsìà
372	grind coarsely	kòpàlàlà	kòpàlàlà	kòpààlà
212	groove, furrow	kàmwáápò	nyóólóli	-
801	ground, cultivated	mògòòndà	mògòòndà	mògòòndà
405	grow up, get large, become great	kòkólà	kòkólà	kòxólà
913	grow (of plants)	kòkólà, kòkòlyà	kòkíindà	kòkìindà
461	grown (be fully)	kòkólà	kòlilòkà	kòtólà
373	gruel, light porridge	ntìlì	ntìlì	ŋkòòmbâ
358	grunt, grumble	kòkànà	kòkànà	kòkányà
205	guide aright	kòtóóŋgèèlà	kòliiŋgyà	kòlàgìilà
351	guinea-fowl	ŋkááŋgà	ŋkááŋgà	ŋkàáŋgá

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
701	gun	múdòózì ?	mpùùsò	bòòndóki ?
702	hair	lòtúúmbì	lòtùùmbì	lòsiiŋgà/nsiiŋgà
977	hair (long straight- of animals and Europeans)	-	òsiiŋgà	nsiiŋgà
75	hair (white, grey)	mbìí	mbyíì	mbiyì
703	hand (flat of)	kòópì ?	kyóópì ?	ìkópì ?
157	hand, right	kwà ndíílò	kòndíílò	kòlílà
439	hand (left)	ŋkígì	kòŋkígì	mùkónó wà kíkìmà
476	handle, haft	mùpínì/mìpínì	mòpínì	mùpìnì
779	hang in mid-air	kònìgìnìílà	kòyèégàmìlà	kòniŋìnìlà
655	hard	ŋkákù	ŋkákù	ikàkò
377	hardship, distress	nzágò	nzágò	màsìgò
294	hare	lòŋwàándò, mpùùndà	mpùùndà	mùnyàáŋgàlà
781	haste	wàáŋgò	òkàáŋgò	kàyà
795	hate, detest	kòshóókìlà	-ìlpìlà	kòtàkà
700	hay	màsáánsí nà móómù	kyókò	màfà ní mòòmò
678	head, chief person	mòkólò, mòtémì	mòkólò	mòkòlò
356	head	túé	túè	itwè/mìtwè
352	head-pad	ŋkátà	ŋkátà	ŋkàtà
561	heap	kìlòòndò	kyòŋgô	ilòòndò
391	heap up, ready/set on fire	kòkólèèlyà móótò	-àákìílyà	kòkákìlyá mòòtò
623	hear	kùìígyà	kòígyà	kìjà
543	heart	ŋkólò	ŋkólò	ŋkòlò
944	hearthstone for putting pots on	màpígwà	pígwà/màpígwà	màpìgà
893	heavy, serious, dull	lòtò	lùtò	nditò
705	heel (of foot)	kìntígìnò	kìintígìnò	kìtìgínyò
681	heifer	ntòkótà ?	-	ŋòŋóómbè
418	hem, make a border	kòhìíndòlà	-	kòpìíndà

No	English	KĭnàUshòòlà	KĭniLàámbà Central	KĭnìHàánzù
690	hen, fowl, chicken	ŋkókò	ŋkókò	ŋkòkò
766	here	ìpà, òkò	ìpà, kwáshò	àpà, òkò
863	hiccup	kĭnsékùnsékù	kìsékùsékù	kĭhèhúhèkù
800	hide (vt)	kòpísà	kòpísà	kòpìhà
38	high, be (of meat)	kòyòlà	kòlùùndà	kòòlà
326	highway	bàlàbálà	bàlàbálà	ipàándà
309	hill	kĭnòlòlò	mùgòóŋgò	lògòlò
925	hip	lòkúnò	yìlĭgánò	-
317	hippopotamus	ŋgùó	ŋgùô	mpèèmbèlè
396	hit with a hammer	kòkòà nà nòòndò	tùlà	kòkònóntèèlà
706	hoe	gyèèmbè	gyèèmbè	ìgèèmbè
990	hold, arrest	kògwìĭlà	kòyàámbà	kòmwàámbà
575	hole, nest	kĭtìĭ	kĭtìĭ	ìbòlòmyò
836	hollow out	-	kòsĭĭmbà	kòhĭĭmbà
816	home	kònsí ítô	kònsí ítò	kìtò (ìtô)
654	honey	òókĭ	òókĭ	òkĭ
150	honour	kòkólyà	kòshímĭĭlà	kòkòlyà
797	hook (for pulling down branches in plucking fruit)	-	ŋkóóŋgyò	-
189	hook (fish)	-	ŋgwàátyò	ndòànò
707	horn, ivory, tusk	lòpéémbè/màpéémbè, mpéémbè	lòpéémbè	lòpèèmbè, ìpèèmbè/ màpèèmbè
288	horse *	-	-	-
708	house	nùúmbà	nùúmbà	nyùùmbà
263	how many?	zìíŋgà	zìíŋgá	-ìíŋgâ
572	hump (of hunchback)	kĭkúkù	kĭkúkù	kĭkùkù
573	hump (of cow)	lwèègà	lòègà	lòkùkù
756	hundred	gànà	gyànà	ìgànà
320	hunger	nzàlà	nzàlà	nzàlà

No	English	KìnàUshòólà	KìníLàámbà Central	KìníHàánzù
33	hunt	kòlyíímà	kòdyàgìílyà, kòlyíímà	kòlàhà
34	hunter (professional)	mòlyíímì, mùntáándò	mùdàgìílyà, mùlyíímì	mùlàhì
35	hunting	kòlyíímà	òdàgìílyà, òlyíímì	kòlàhà, òlàhì
227	husband	mùgóóshà	shéénìè	mùgòhâ
808	hut	kàtàándò	kìyàándà	kìtàlâ
709	hyena	dyòòtò, mpíti	ŋkyàátô	mpíti
1016	I	fínè	ìnè	nèèné
1013	idleness, sloth	òkátà	òkátà	òkàtà
901	ill (be); groan	kòlwáálà	kòlwàálà	kòlwàlâ
902	illness, (crippling)	òlwíílè	òlwíílè	òpèlè
275	imitate	kòlólìkìílyà	kòyíígìílyà	kòlàgìtìà
16	in front of	kòntóóŋgèlà	ntóóŋgèlà	kònhòòŋgéélà
353	in the middle of	pàkàtî	pàkàtî	pàkàtì
118	incite	kòsíshìkìílyà	kòkìnîlà	kòsóóŋgèèlà
206	increase, make greater	kwìyóóŋgèèlyà	kòkólìílyà	
155	increase	kòkílìkìílyà	kòyóóŋgèèlyà	kòkìlà
426	inheritance	òsàáli	òsàáli	kòsàlà
542	inside, in	mùkàtî	mùúnsô	mùkàtî
353a	inside, middle	mùkàtî	mùkàtî	mùkàtì
132	intestines	òlà	òlà	màlà
389	intoxicated (get)	kògàálà	kòkígàálya	kògàlà
513	iron ore	màgùè má kyòómà	màgùè má kyòómà	-
264	iron	kyòómà	kyòómà	mòhòkâ/màhòkâ
710	island	-	kìóŋgòòŋgò	-
2	itch	kòyáágà	kòyàgá	kàágà
460	jammed (become)	kògágà	kòsíítìílà	kòkwàmà ?
853	jaw (bone)	nzágàsà	nzákàsà	mùlàámbò
960	jealousy	wìílû	wìílû	wìlù

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
271	journey	mùsíínzò	mùsíínzò	lòsíínzò/nsíínzò
606	judge (vt)	kòlàmùlà	kòlàmùlà	kòlàmùlà
810	jump, leap	kòpòòtà	kòpùùtà	kòpùtà
477	kidney	*mpígò*	*mpígò*	*mpìgò*
218	kill	kwiyólàgà	kòyólàgà	kòwòlágà
677	king	mùtémì	mùtémì	mòtémì
787	kite	nsàánsì	nsáánsì	màlèlè
347	knead	-	kòyóónà	kòkàándà
348	knee	lúú/màlúú	lúù	ìlù
427	kneel	kòtúúŋgámà	kòtúŋgàmà	kòtùgámà
607	knife	nsíímè, njòólò	nsíímè	lòpyò
402	knife, thin, curved, broad-bladed	-	myòòlèlò	nzòlô
704	knot	gyúúndò/ màgúúndò	liindò	ikùùndò
626	know	kòmànà	kòmànà	kòmànyà
178	lake	láámbò ?	nàànzâ	lòòzì ?
151	lame (be)	kònónìlà	kònúnìlà	kòsùŋkílà
511	lamp	tàlá	ntàlà	ntálà, nhálà
99	land (dry)	nsí nóómù	nsî	ihì ní ŋkàkù
761	large, great, big *	kyólò	kyólò	ŋkòlò
94	laugh	kòshèèkà	kòsèkà	kòhèkà
792	*lay over on one side*	-	kònímîkà	kòkùnîxà
1000	lazy	mùkátà	mùkátà	-
699	leaf, blade of grass	shàánzí	shàànzì	ifà/màfà
1025	leaf (tree)	lóká	lóká	ìtòòtô
911	leak, ooze out	kòshólòlà	kòsòlòlà	kòhòólà
96	lean, bend down, slope	kòtùnà	kòtùnâ	kòtùnà
536	lean on, rely on	-	kòsàníà	kìhóìlà
796	lean, become; grow thin	kònyèèkà	kònyéékà	kònyèkà

No	English	KìnàUshòòlà	KìniLàámbà Central	KìnìHàánzù
535	leaning (be)	kòyégèmèlà	kòyéégàmìlà	kwèègémèlà
613	learn	kòkímànià	kòkílìŋgyà	kìlíŋgàsà
546	leave, permission	kògòmbigwà	ògóómbigwà	-
1011	leave over	kòsháágyà	kòsáágyà	kòsàjà
547	leave, go away	kòlégà	kòlégà	kòlòŋgòlà
544	leave (off)	kòlèkà	kòlèkà	kòlèxà
975	left over, (be); remain over	kòsháágà	kòsáágà	kòsàágílà
310	leg, foot	mògòlò/mìgòlò	mògòlò	mùgòlò/mígòlò
774	lend, borrow	kòyáázùm(w)à	kòyáázìmà	kàzímà
107	leopard	nsɔ́ì	nsɔ́ì	ìhùì
878	lick (vt)	kwìlyàámpà	kòlyáámpà	kòlàámbà
134	lie down	kògɔ̀nà	kògɔ̀nà	kòlàlâ
250	lie on one's back	kògɔ̀nà nsàŋgàlìlì	kògɔ̀nà nsàŋgàlílì	kòlàlâ hàŋgáìlì
791	lift up, pick up	kònàànsɔ̀là	kònyàánsɔ̀là	kòhɔ̀mbɔ̀lyà
467	light in weight	-pépèèlè	mpèpèèlè	mhèpèèlè
304	light, sky	lùùndè	gyɔ̀lɔ̀	ilùùndè
805	lightning	lɔ̀pìtò	ùméme ?	lɔ̀pìtò
657	lime, whitewash	ŋkèéŋkè	ŋkééŋkè	shòkálà
213	line, row	mɔ́sitááli ?	mùnyólòòli	mɔ̀sitàáli ?, mùsìli
659	line, fishing	-	múŋkàándà ?	lòdìgì
103	lion	nsíímbà	nsíímbà	ìhìímbâ
198	lip	mùlòmò/mìlòmò	mùlòmò	mùlòmò
956	listen	kòtégèèlà	kòtyégèèlà	kòtègéélyà
972	listless (be)	kòtòòntà	kònyékètà	kòtòòntà
1024	liver	tyímà	tyímà	ìtùmà/màtìmà
429	livestock (keep)	kòshàà	kòpùùgà	kòpùgà
819	lobster	-	-	-
794	locust	nzìgè	ŋkóómbì	nzìgè

No	English	KìnàUshòòlà	KìníLàámbà Central	KìníHàánzù
155a	long (become)	kùlyìípà	kùlyìípà	kùlípà, kùkílyà
144	*long*	*lyíípù*	lyíípù	*ìùlípù*
131	look after, care for	kùkéndègéélà	kùkéendègéélà	kùtùùnzà ?
871	look after grazing cattle, help a *sick man on the road*	kùdìì̀mà	kùsùùŋgà	kùdìì̀mà
354	look at, examine	kùlyàà	kùlàáwà	kùgòzèélà
354a	look around	kùlálàálà	kùlàlàálà	kùgòzà
200	*look for, hang around (to get* something), pursue	*kùshèèndèlyà*	*kùdùùmà*	*kùlíndìílà*
973	loose (be); faint, weak	kùnyèmèntálà	kùtòòntà	kùtòlyà
181	lost, get	kùlímìílà	*kùlímílà*	*kùlímílà*
1023	louse	mpànì	mpànì	mpànì
769	love, want	kùlyóógwà	kùlóógwà	kùlòwà
934	lung	pyóópò/màpóópò	pyóópò/màpyóópò	*ìpòpó/màpòpó*
713	magic *	òlògì	òlògì	òlògì
714	maize	mpókìlè	pókìlè	kìmpùkìlè
521	make offerings to the dead	kùpólyà	kùpólyà	*kùkùà ìndàgò ?*
226	male	mùgóóshà	ŋgóóshâ	ìgòhà
10	mamba, green (kind of poisonous snake)	kípìì̀mbì	kàpìì̀mbì	-
793	many	ííŋgì	nííŋgì	ídó
1019	many *	ííŋgì	nííŋgì	ídó
897	marriage	òtóólè	ntóólà	kùtìnà
895	marry (of man)	kùtóólà	kùtóólà	kùtìnà
896	marry (give in marriage-of parents, priests)	kùtóóliishà	kùtóóliisyà	kùtìnísà
814	master	-	shékyàáò	mùgòlì
888	match, harmonise (vi)	kùlìgànìì̀là	kùlìgànìì̀là	kwìì̀mpyáni
935	mature	-kólò, -kámù	ndìlókù	lìkòmèlè

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
596	meat	nàmà	nàmà	nyàmà
259	medicine, remedy	òkótà	òkótà	ògàáŋgà
260	medicine (art of medicine man)	ògàáŋgà	ògàáŋgà	-
261	medicine-man	mògàáŋgà	mùgàáŋgà	mògàáŋgà
90	meet	kòtáágànà	kòyáágànà	kòhàáŋgà
861	melt	kònyèkèntùkà	kònèkèntòkà	kòyèyùkà ?
845	midwife	-	mòlèèsì	mùtògisyà
859	migrate, move away	kòshàámà	kòsàámà	kòhámà
1030	milk (n)	màsóónsó, màsóóŋgâ	màsòònsō	màsóónsò, màèèlê
20	milk (curdled), curds	màsóónsó màgònû	-	kìlàhà
19	milk, (fresh) (n)	màsóónsô	màsóónsô	màsóónsò
903	millet (bullrush)	òwèèlè	òwèlê	òwèlè
290	millipede	góŋgòlî	gyòŋgòlô	ìgòòŋgóli
73	mix (ingredients, `season food')	kòyòòŋgà nánì	kòsàálìŋkànìà	kòòŋgà
72	mix, put together	kòshàlìŋkányà	kòsàálìŋkànìà	kòhàŋgìlìŋhányà
363	monkey (small lightish-coloured)	ntóómbìlì	ntóómbìlì	ntòòmbìlì
362	monkey (colobus- (with long black silk hair, white on shoulders)	-	kìjìfjìì	mhìímbì ?
361	monkey (small, dark-coloured)	-	mpóómà	mpòmâ
716	moon	mwéélì	mwéélì	ŋwèèlî
609	moonlight	-	mwéélì mòlìkà	ŋwèèlî
59	mosquito	mbó	mbó	mbò
436	mother	mááyò	mááù	iyáá
65	mould (pottery)	kòyóómbà	kòyóómbà yòòŋgò	kòòmbâ
717	mountain	mùlímà	ŋkóóŋkò	lògòlò
163	mouming	sóókà	kìlìlò	sókà
1026	mouth	mùlòmò	mùlòmò	mùlòmò
272	movement	kògèèndà	lògèèndò	lògèèndò

No	English	KìnàUshòòlà	KìniLàámbà Central	KìnìHàánzù
979	mud, mire	màlòlò	lyòlò/màlòlò	màlòlò
642	mushroom	òòwà, òlóózè	lyóózè	ìnùnwè
152	mutilated (be)	kòlémàálà	kòlémàálà	kòlèmàlà
281	name	líínà	líínà	líínà
539	namely	kìnàíti	yàáni ?	íti
403	nape (of neck)	kìɪ̀ŋkòti	òkósi	kìnùnwî
256	navel	nyókù	nyókù	ìyùùmbù
765	near	píipì	píipì	pàkùpì
379	neck	ŋkííŋgò	ŋkííŋgò	ŋhììŋgò
843	need, request	lyóómpì	lyóómpì	nhákilè
962	new	mpyâ	mpìà	mpyà
718	night	òtíkò	òtíkò	òtìkò
755	nine	kèèndà	kèèndà	kèèndà
484	nose	mpòlà	mpòlà	mpòlà
211	number	mùlòòŋgò, nàámbàli	-	kòályà
237	oar	màtííŋkò	-	-
939	obstruct	kòpìɪ̀ŋgà	kòkííŋgàmyà	kòhìtílyà
48	offspring	mwáánà	mùlèlwâ/àlèlwâ	ŋwàànà
66	oil (from plants)	màkútà	màkútà	màkùtà
435	oil	màkútà	màkútà	màkùtà
818	old times, the past	kàlî	kàlî	kàlî
411	old person	mònáámpàlà, mùkòòmbî	mùnámpàlà, mùkòòmbî	mùnyàmpàlâ, mùxòòmbî
410	old	ŋkólòkòlò	ŋkólòkòlò	ŋkòlókòlò
214	one-eyed (being)	-	kyòpô	-
440	one	kàámwî	kàmwî	kàŋwî
590	open mouth wide	kòyánsàmà	kòyáánsàmà	kàmáhà
984	open	kòdùgòlà	kòkígòlà	kòlògòlà
829	open (set ajar) a door	kòdîndòlà	kòkígòlà	kòlògòlà

No	English	KìnàUshòòlà	KìníLàámbà Central	KìníHàánzù
876	order, direct	kòlàgìílyà	kòlàgìílyà	kòlàgìílyà
961	ostrich	nóóŋgù	núúŋgù	nyòòŋgô
640	our(s) pl. 1st person)	yìítû	yìítû	itò
506	out (go), go away	kòpúmà	kòpúnà	kòpùmà
324	outside	kòónzì	kòòzî	kònzì
217	overcome; win, vanquish	kòdólà	kòdólà	kòshìíndà ?
995	owed by, be	kòdàài	kòdyàigwà	kòdàáyà
835	oyster	-	-	-
207	pack (luggage)	kòyííkà pàlómwì	kòtúúŋgà	kòtùùŋgá pàlòŋwî
208	pack, press together	kòpàáŋgà	kòpìmbìzìílyà	kìzólyà
456	pack, flock, group	dyálè/màdálè	dyálè/màdálè	idàálè/màdàálè
457	pack, bale, bundle (n)	mùlígò	búúŋkù/ màbúúŋkù	mùligò
236	paddle (n)	mùtííŋkò	mòtííŋkò	-
342	palate	-	-	ilàáŋgò
9	palm (date)	-	mùtééndè	-
719	palm-wine	-	ntólò	-
257	palm (of hand)	gàánzà, kìgàánzà	gyàánzà	lògàánzà
6	palm (raphia)	-	kìàlálè	mwàálé
7	palm (borassus)	múpàámà	múpàámà	-
8	palm (oil)	-	-	-
459	palpitate, flutter, tremble	kòkìkìmà	kòpùnùntìkà	kòkàgàtà
47	parent, s/he who begets	mùlèli	mùlèli/àlèli	mòlèlì/àlèlì
720	parrot	-	-	-
232	pass, surpass	kòkílà	kòkílà	kòkílà, kòhítà
325	path	nzìlà	nzìlà	nzìlà
159	pay	kòlìpà	kòlípà	kòlìpà
600	pay attention, take care	kòlyàáwà	kòliíndìílà	kògòzèèlà
820	peel, shell	kòkáátà, kòyólòòlà	kòyòólòòlà	kòbàlyà

No	English	KînàUshòòlà	KînílÀàmbà Central	KînìHàànzù
12	peg	lùlû	lòkííŋgì/ŋkííŋgì	màbòlòmyò
11	pegs (tent)	lòkííŋgì/ŋkííŋgì	lòkííŋgì/ŋkííŋgì	lòmàámbò/ màámbò
494	penetrate	kòkísìílyà	kòkíshìílyà	kòdóólà
721	penis	kilògà/milògà	kìdògà/mìdògà	ilògà
884	penknife, lancet	kàlógòóndè	kàgèèmbè	lòpyò
558	person	mòòntò	mòòntò	mòòntò
638	pestle	mwìisì	mùkóóŋkò	mùtwàáŋgìlò
312	pig	ŋgúlùmà	ŋgúlùmà	ŋgùlímà
414	pigeon, kind of	ŋkòóndà	ŋkóóndà	ŋkóóndà
579	pile up, pile loads on head	kòlòòndìílà	kòkítwìikà	kìtíkà
479	pinch, make narrow	kòshìnà	kòsìnà	kòhìnà
357	pipe (tobacco)	-	mútèémbà	kíxò ?
552	pit, hole	lyììndî	lyììndî	ìkòòmbò
974	place, put (vt)	kòyííkà	kòìîkâ	kòìîkâ
722	place (n)	pà lwàándî	lwàándî	kìsàlî
892	place of the dead	kò òlòòŋgó	kò òlòòŋgò	kò àlòòŋgò
225	plait	kòshùkà	kòpótà	kòhùkà, kòpòtyà
932	plant, sow	kòpàándìlà	kòpàándìlà	kòtèmélà
510	platform	kìyàándà	kìtálà	kìtàlâ
834	please, satisfy (vt)	kòlòòmbìílyà	kòtòòntià ŋkólò	kòlòòwéshà
93	pleased (be)	kòlóèligwá	kòlóógèèlwà	kòlòwà
13	plot of ground	kìyáánzà	kìyàánzà	kìwáánjà ?
647	plunder (a town)	kòlégèlyà	-	kòwámbà
1014	plunge into, cause to sink	kògòmìlà	kòkápìlyà	kògùmìlà
114	poke	kòkólèèlyà	kòshòònsèlà	kòpèmbéélà
737	pole, thin	lòkìtò	lòkìtò	lòxìtò
111	polish, clean by rubbing	kòkòlòsà	kòmíítyà	kòsògòlà
177	pool, pond	lyáámbò/màláámbò	lyàámbò	ìlàámbò

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàànzù
923	porcupine	kábòòsòlò, nòòŋgòlì	nògòlì	ìséénsè
374	porridge (stiff)	ògàlì	ògàlì	ògàlì
42	pot (metal)	gyòbô	kyòpô/màkyòpô	ìxópò
41	pot, vessel	kìsèmè	kìshèmè/ìshèmè (pl)	kìsèmè/isèmè (pl)
39	pot, mug	múkébè	màkébè	màkébè
40	pot, cooking (earthen)	kyòòŋgô	kyòòŋgô	nyòòŋgò
749	potato (sweet)	kándóólò	kíndóólò	kàándólò
646	potter's kiln	shòònsèlò	shòònsèlò lyá nòòŋgó	-
369	pound (grain in a mortar to get off the husks)	kòpyóólà, kòkòòzòlà	kòsókòlà	kòtwàáŋgà
441	pour away	kwìítà	kòíítà	kòhùnólà
641	pour	kòpóóŋgòlà	kòtáágìlà	kòdùbúnshà
748	pregnancy	ndà	ndà, íímbi	ndà
636	pregnant, be	kòtòlà ní ndà	kòkééŋkà íímbí	múlító
599	prepare	kòjìpìílyà	kòjìpìílyà	kòzìpìílyà
553	press out (oil seed, sugar cane)	kòkásìmà	kòkásìmà	kòkàmólà
986	produce, put forth, display	kòpííshà	kòpúnìà	kòpùmyà
909	prominent (be); put out	kòpúnìlà	kòpúnìlà	kòpùmà
518	pronounce	kòtáámbòlà	kòtáámbòlà	kòtàámbòlà
340	protect by charm (medicine)	kòkágà	kòkágà	kòkàgòlà
947	protect by charms (target)	kòkágà	kòtúúŋgìílà	kòkììŋgà
475	puff-adder	kísòópà	kínsòópà	màmà
244	pull	kòlùtà	kòlùtà	kòlùtà
173	pull up, come to a halt	kòyíímà	kòyímìkà	kìmíkà
172	pull up, root up	kòkóólà	kòkóólà	kìpà
833	pull, drag	kòlùtà	kòkókòtà	kòlùtà
57	pump	bóómbà	-	ìbóómbà
548	push	kògòmà	kògòmà	kòsùkúmà ?
992	put, place, set	kòyííkà	kòyííkà	kòìxâ

No	English	KĭnàUshòòlà	KĭniLàámbà Central	KìnìHàánzù
887	put together for comparison	kòlĭgàn̄ĭĭlyà	kòlĭgànĭĭlà	kòlĭĭŋgàsyà
969	put a pot on the fire	kòtélèkà	kòtélèkà	kòtèléxà
981	put together, compose	kòtúúŋgà	kòíliŋgĭĭlà	kòtùùŋgà
862	python	nsátò	nsátò	nsátò
656	quarrel (vi)	kòkílèèà	kòkílééà	kìléá
180	quench, extinguish	kòdíbyà	kòdíbyà	kòlìmísà
485	quiet (be)	kòlikà, kòtóólyà	kòtóólyà	kòkilágà
76	rain	mbúlà	mbúlà	mbúlà
917	rain (vi)	kòkóá mbúlà	kòkóá mbúlà	kòkòá mbùlà
1006	rains, the lesser	mwáánòli	sòòŋgólà	msisílà
197	rainy season	kìtíkò	kĭtíkò	kìtìkò
580	rumble	kògùgùmà	kògùgùmà	kùùŋgùlùmà ?
26	rat, kind of	-	kádòlĭ	ŋkéénzì
488	rat (field)	ŋkòsò	m(ù)kíiŋki	mpòxò
24	rat	ŋkòsò	mpókò	mpòxò
25	rat- (very large, long-tailed)	-	mùkíiŋki	-
883	razor	lówèémbè	lówèèmbè	kìwéémbè
949	read	kòshòmà	kòshòmà	kòsòmà ?
1007	reap, harvest	kòyĭĭmbòlà (maize), kòyògòlà (millet), kòkùnà (hard peanutst), kòkyàlà (cotton)	kòyògòlà	kòògòlà (millèt), kòhĭĭmbà (pèánùt)
523	receive	kòyáánùŋkòlà	kòpòkèèlà	kòpòkèèlà, kòhòlà
537	reed	màtétè	kùlùflì/màkùlùílĭ	màtétè
632	refuse, say no	kòshiítà	kòsíítà	kòhìtâ
633	reject, refuse, dislike	kòshiítà	kòsíítà	kòhìtâ
545	remain, stay behind *	kòsháágà	kòsáágà, kòsòlòkà	kòsìijâ
1035	remain, stay	kòsháágà	kòsáágà	kòsìigâ, kòsàágâ
840	remember	kòkíjòkà	kòkíjòkà	kòkòmbókìlà
499	resemble *	kòkímpyàánà	kòkímpyàánà	impyáánî

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
879	resemble (very closely)	kòkímpyàànìkà	kòkímpyàànà	ìmpyáánî
1031	resemble *	kòkímpyàànà	kòkímpyàànà	impyáánî
149	rest heavily on, be burdensome	kòlyèmèèlìgwà	kòlèmèèlà	kílèmèèlà
964	rest the cheek on the hand (in brooding mood)	kòyàámbà tyámà	kòyàámbà tyámà	kwàámbìlà ìtàmà
957	rest, take a holiday	kòshòòpyà	kòsòòpyà	kòsòpyà
249	return, go back	kòshòòkà	kòshòòkà	kòsòkà
1004	return	kòshòòkà	kògòmòkà	kòsòkà, kòzà
500	revive	kòíyòólà	kòyìóólà	kòkìóshà
318	rhinoceros	mpèèmbèlè	mpèèmbèlè	-
988	rib	lòbàlù/mbàlù	lwàálù/mbàlù	lòbàlù/mbàlù
473	ripe	mpfísù	mbílù	ìilyè
996	ripen (vi) *	kòpíà	kòyílà	kòìlyà
472	ripen (vi)	kòpíà	kòyílà	kòìlyà
209	river	mòòŋgô	mòòŋgô	mòòŋgò
239	roar, rumble	kòlúlùmà	kòlùmà	kòùŋgúlùmà ?
644	roast	kòkómèlà	kòkálàáŋgà	kòkàlááŋgà
350	roast (in/by fire)	kòyàáshà	kòyàásìà, kòsòónsà	kwàásà
806	rock	gòè	pyàámpà	lògòlò
291	rooster (cock)	móómbì	móómbì	mómbî, nsàmbàlígògò
169	root	mòli/mìlì	mòli/mìlì	mùli
29	rotten	yòlû	yòlû	ìbì
1012	round (be)	kòkíìliŋgìlà	kòpìindìŋkànià	-
183	round (go), turn round	kòpilimikìílyà	kòlóóŋgòtìílyà	kòpìlímà
999	round, become	kòkíìliŋgìlà	kòlyóŋgòtìílyà	kòpìlímà
110	rub	kòkòlòsà	kòkwèèmà	kòsògólà
50a	rubbish, garbage	mpàlàlà	mpàlàlà	mpàálà
321	rubbish heap	kìógòólò	lyìindí lyà màlàgàlà	ìzólà
826	run	kòmàáŋkà	kòmááŋxà	kòmàáŋkà

No	English	KĭnàUshòòlà	KĭníLàámbà Central	KĭníHàánzù
522	sacrifice	pólyò	pyólyò	ìsòòŋgèèlyò
723	salt	mùlééŋgè	mùlééŋgè	mùùnyù
95	sand	mùnsàáŋgà	múnsááŋgá	mìhàáŋgàhàáŋgà
630	satiated (be); have enough to eat or drink	kòkíkòtà	kòkíkyòtà	kìkótà
788	satisfy	-	kòtòòntyà ŋkólò	kòtòóshâ
251	say to, tell to	kòyíílà	kòyíílà	kòkwìílà
783	scorpion	ŋgìì	ŋgìì	ŋkòmì
453	scrape	kòpyálà	kòpyálòlà	kòpàlà
855	scrape, grate	kòkwàámòòlà	kòŋwèétòlà	kòpàólà
856	scratch, grate *	kòkwàámòòlà	kòsòà	kòkwàòlà, kòhòà
668	scythe, sickle	-	myòòlèlò	ìzòlò
84	search for	kòdùùmà	kòdùùmà	kòdùmà
85	search diligently	kòkùlàáŋgà	kòkípùkyà	kòkwàólà
738	seat, stool, chair	tyèéŋgô	tèèŋgô	ìtùùntù
770	see	kòyónà	kòyónà	kòònà
67	seed	mbéò	mbéò	mbèò
404	seize	kògwìílà	kògwìílà	kòwàámbà
611	self	nzílì	mùkólà	nyèènsò
302	sell	kògòlyà	kògòlyà	kògòlyà
570	send	kòtómà	kòtwáálà	kòtómà
451	separate, set apart	kòlèkànòlà	kòkámàtòlà, kòlàgìílyà	kòlèkànsyà
450	separate, leave each other	kòkílèkà	kòkílèkà	kìlékànòlà
534	set a trap	kòyìpyá, kòtégà	kòtyégà	kòtègà
868	set (of the sun)	kòshàálìílà	kòsálìílà	kòhálìílà
971	settled (be); be in good order	kòjìpà	kòjìpà	kòlèmbèlà
754	seven	ɔpúúŋgátì	mpùúŋgátì	mfùŋgátì
1033	sew *	kòtúmà	kòtúmà	kòtùmà
589	sew	kòtúmà	kòtúmà	kòtùmà

No	English	KìnàUshòòlà	KìníLàámbà Central	KìníHàánzù
135	sexual intercourse with (have)	kòtòómbà	kògólólyà	kìítómbà
691	shadow, shade	mùlúlè, lòlímìlímì	mùlúlè	mùlúlè, kìlímílì
867	shame, disgrace	nsónì	nsónì	mìnyàlà
116	shame	nsónì	nsónì	mìnyàlà
724	shame, modesty	nsónì	nsónì	mìnyàlà
386	sharp (be)	kwìyóópìkà	kòyópìkà	-tàkì ?, nyìgì ? (àdjs)
920	sharpen	kùnòólà	kùnòólà	kùnólà
915	shave	kùmòà	kùmòà	kòzùlâ
603	she, he	ὸyò	ὸyò	ŋwèènsò
287	sheep	ŋkòlò	ŋxòlò	ŋkòlò
1009	shell, cowrie	ŋkúlà	kúlùkúúmbà	nsɪ̀ɪ̀mbɪ̀
822	shell	-	-	ntɪ̀ŋgòlò
725	shield	-	ŋgòlâ	ŋgòlà
712	shin (bone)	mùlóóndì/mìlóóndì	mùlóóndì	-
968	shiver, shudder *	kòkɪ̀kɪ̀mà	kòkɪ̀kɪ̀mà	kòkágàtà
528	shiver	kòkɪ̀kɪ̀mà	kòkɪ̀kɪ̀mà	kòkàgàtà
434	short	kúpɪ̀	kúpɪ̀	ŋkùpɪ̀
430	shoulder, tip of	-	-	ìyègà/màègà
588	shoulder	yègà/màègà	yègà/màègà	ìyègà/màègà
839	shout	kòjógòlyà	kòkítòòntà	kùkútà
946	shrivelled (be); wrinkled	kòkísìnà	kòkísìnà	kìhínàáŋgà
763	sick	lwílè	lwílè	-lwàálà
870	sift	kòyòòŋgyà	kòsékèènsyà	kòhègéénsà
615	sing	kòyíímbà	kòyíímbà	kɪ̀ɪ̀mbà
3	singe	kòyáàlà	kòyáàlà	kòsòónsà
980	sink, be drowned	kòtòtà	kòtòóntà	kòtòóntà
170	sink	kòyúmìlà ?	kòtúìlà	kòlímílà
726	sister (his)/ (her) brother	mùgólì, mùnùnà, ìlòòmbò	mùgúlì, mùnùnà	ìlòmbò

No	English	KìnàUshòólà	KìníLàámbà Central	KìnìHàánzù
627	sit	kòkíkàlàánsà	kòkíkàlàánsà	ikìì
753	six	mùtáándàtò	mùtáándàtò	mùtàándàtò
785	size, measure	-	ŋgèlê	-
123	skin (of person)	ndìlì	mùkúúnzà	ndìlì
124	skin/rind (of fruit)	gyáándà	kúlùkúúmbà	ìgándà ?
303	sky	lùùndè	gòlò	ilùùndè
865	slander, accuse falsely, often secretly	kòshòòŋgèélà	kòshòòŋgèélà, kòsòòŋgèélà	kòsòònsèélà
470	slap	kòkóà ŋkói	kòkóà kòòpi	kòkòá ikópi
970	slash	kòtémà	kòtíà	kòtémà, kòdòmòlà
220	slaughter	kòshíínzà	kòsíínzà	kósìnzà
727	slave, bond servant	mòsèsè	mùsèsè	mùnyà milìmò
728	slave (female)	mòsèsè	mútùgwà	mùnyà milìmò
729	slave, (male)	mòsèsè	mútùgwà	mùnyà milìmò
136	sleep (vi)	kògónà ndóólò	kògónà ndóólò	kòlàálá tòlò
731	sleep (n)	ndóólò	ndóólò	tòlò
730	sleeping-place, accommodation	pà ògónò	pà kògónà	pà kòláálà
967	slip, be slippery	kòtyèlèmùàkà	kòtyèlèlà	kòtèlèzà ?
1021	small	níínò	níínò	níínò
332	smallpox	ndwì	ndòì	ndòì
241	smell (sweet) (vi)	kònùùŋkìílà	kònùùŋkìílà	kònyùŋkàlà
242	smell (bad, of fish) (n)	kònùùŋkà	kònùùŋkà	kònyùùŋkà
240	smell (bad) (vi)	kònùùŋkà	kònùùŋkà	kònyùùŋkà, kòòlà
629	smoke (n)	lyóókì	lyóókì	lyòòkì
428	smoke (give out) (vi)	kòjòòkà	kòtùùŋkà	kòtùùŋkà
387	snail, slug	ŋkòòkù	ŋkòòkù	ŋkòòkù
837	snail	ŋkòòkù	ŋkòòkù	ŋkòòkù
145	snake, serpent	nzókà	nzókà	nzòkà
158	snare, trap (n)	mútègò	mútègò	mùtégò

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
864	sneeze	kòtyàámùlà	kòtyáámùlà	kòtèmúlà
924	sniff, smell out	kònùùŋkyà	kònùùŋkyà	kònyùùnshà
296	snore, snort	kòkòlòmà	kòkòlòmà	kòkòlòmà
69	soil	òlòòŋgô	òlòòŋgô	òdóóŋgò
732	song	lyíímbò	lyíímbò	wìmbò
616	songs *	míímbò	míímbò	mìmbò
36	soot	màkíli	màkíli	mbilò
195	sorcerer	mùlògi	mùlògi	mùlògi
201	sore	ŋkòòŋkô	ŋkòòŋkô	ŋkòmèlè
734	soul, spirit	ŋkólò	ŋxólò	ŋkòlò
331	sound, cry	mòlílò	mòlílò	mùlílò
64	space (open)	kìyáánzà	kyóógà	kìpòlâ
82	spark	nsàànsî	nsàànsî	nsàsî
253	speak	kòtáámbòlà	kòtáámbòlà	kòtàámbòlà
733	spear (n)	ndilìmà	ndilìmà	ndilìmà
137	spend time	kùgèèndàgèèndà	-	kòligìtyà
1038	sperm, semen	-	mbéò ?	mànálà
62	spider	tyátì	tyátì	ìtátì
182	spirit (of dead person)	mòlòòŋgò	síímwì	mìnhúúŋgà
464	spirit (disembodied)	-	múntùùŋgâ	mìnhúúŋgà ?
683	spirit (evil)	mìintúŋgà, àlòòŋgò (pl)	mòlòòŋgô	mìnhúúŋgà ?
582	spit	kòtyá màtî	kòtíà màtî	kòtyá màtî
533	spittle	màtî	màtî	màtì
601	split, crack (vt)	kòlyèkànòlà	kòtàándòlà	kòpàsòlà
951	spoil, blind (vt)	kòpòkùlyà	kòpòkùlyà	kòpòkùlyà
649	spoil (a child)	kòpùnìà	kòlèlèmà	kòdèkyà
998	spoil	kòyónòònà	kòyónòònà	kògàzànjà
813	spoon	mùtííŋkò	kìtííŋkò	mòtììŋkò

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
5	spot, speckle	dyòà/màdòà	dyòà/màdòà	màlòà, màbàà
959a	sprain an ankle	kòtyégòkà	kòtùùmbòlà	kìsòŋkóèlyà
141	spread out (be)	kwìyééndèlà	kòtánàántyà	kìzólà
527	spread	kòyáálà	kòyáálà	kwàánzà
908	spread abroad, be; become generally known	kòkúmòòkà	kòkúmòòkà	kòmànyìkà
592	spread, smear on	kòpyákà ?	kòdòbìà	kìpàkà ?
591	spread, scatter (vi)	kòsháámbàálà	kòsápàtìlà	kòsàmbáìlà
880	spring (of water)	nzyìílò	lyàlò	ndìílyò
965	spring, machine	-	máshìínì ?	-
866	spy out	kòkólèkèèlyà	kòkólèèlyà	kòdùmà
849	squat (on the haunches)	kòshónsàmà	kòsónsàmà	kòsóónsàmà
991	squeeze oneself up against a wall (e.g. to allow another to pass)	-	kòyégàmìlà	kwèègémà
914	squeeze out	kòmìnà	kòmìnà	kòmìnyà
343	squeeze, milk	kòshéémà	kòsónsòlyà	kòxàmà
102	squirrel	kyííndì	kííndì	ŋkííndì
562	stack, pile up	kòlòndìílà	kòlóndìílà	kògùndìlà
1029	stand (vi)	kòyímìkà	kòyímìkà	kìmíkà
735	star	nsòòndâ	nsòòndâ	nzòtà
390	stare, glare	kòlááŋgòlà	kòkóólà mìísò	kògòzéélà
202	start off, send away	kòléégyà	kòléégyà	kòhèjà
799	startle, catch unawares	kòpúmpùkìlyà	kògòòndòlà	kòlìímbà
830	startle, jerk	kòpúmpùkìlyà	kòtùúmbà	kòhògólyà
618	steal	kòyíà	kòyíìà	kìià
266	steel	-	-	-
554	stem (of maize, millet, etc.)	lòpèlèlì	lòpélèli	ìpééli/màpééli
825	step over	kòpòòtà	kòpùùtà	kòkìlá, kòpùtà

No	English	KìnàUshòòlà	KìníLàámbà Central	KìníHàánzù
315	sterile man (or woman)	mògòòmbà	mùgòòmbà	mùgòòmbà
541	stick	ŋkòmê	ŋkòmê	mùlàáŋgà
74	stir, mix by stirring	-	kòkùlùgà	kòhàŋgìlĩŋkànyà
850	stir	kòkòlògànìà	kòkùlùgànìà	kòkùlùgà
78	stir up	kòlísòlà	kòsàkòlĩlyà	kòpùmyà
61	stone	gùè/màgùè	gùè/màgùè	ìgwè/màgwè
228	store up, collect	kòílìiŋgĩĩlà	kòílìiŋgĩĩlà	kòhàŋgwĩĩlà
154	straight (make)	kògòlòòlà	kògòlòlà	kògòòlà
268	stranger, guest	mùgèèndâ	mùgèéndà	mùgèni
661	stream, current	kàmwáápò	kàmwápò	mùxóóndò ?
798	strength, power	ŋgùlù	ŋgùlù	ŋgùlù
140	stretch oneself	kòkígòlòòlà	kòkígòlòlà	kìgóólà
395	strike, knock	kògòòŋgà ?	kòkúnĩlà	kòkóà
982	strike with a spear	kòshòmà	kòsòmà	kòhòmà
282	string (n)	òsùnè	òsùnĩ	lòsìnè
487	strip off (e.g. grains of corn)	kòpòlòlà	kòpóòlà	kòpòòlà
519	strut proudly	kòkíkùmyà	kòkísàmàájyà	kíònà
407	stumble	kòkúúmpà	kòkúúmpà	kòkúúmpà
997	stunted (be); be spoilt	kòkáŋkànàlà	kòkákĩlà	kìtíílà
948	stutter	kòshékìmà	kòsékèmà	kòhàtátĩĩlyà
594	suck (the breast)	kòyóóŋkà	kòyóóŋkà	kòòŋkà
480	suck (vt)	kòpípà	kòpípà	kòónsè ?
912	suffer, bear patiently	kògígìmĩĩlyà	kòkígìgìmĩĩlyà	kògìmyà
802	sugar cane	mòòwà	mòòwà/myòòà	mùwà ?
333	sun, light	pàsô/mpàsô	nzúwà	lyòòwà
184	surround	kòpìlìmĩĩlà	kòpìlìmà	kòpìlìmà
438	swallow	kòmìlà	kòmìlà	kòmìlà
777	swear	kwìlàpà	kwìlàpà	kòlàápà

No	English	KìnàUshòòlà	KìniLàámbà Central	KìnìHàánzù
905	sweat	yìlà	yìlà	-
392	sweep up, collect in a heap (rubbish)	kòílíŋgìlà mpàlàlà	kòlòndíílà	kíliíŋgìílà
943	sweep	kòpyágòlà	kòpyáágòlà	kòpyàágólà
517	sweet, pleasant	nònû	ŋkyúkòóki	mùlyò
51	swell	kòíímbà	kòíímbà	kòimbà
608	sword (short)	nsiímè	shíímè	lòpyò
933	sword	mpááŋgà	mpááŋgà	pàáŋgà
360	tail	mòkílà	mòkílà	mùkílà
875	take leave of	kwílàgà	kòlàgà	kòlàgà
778	take in (from rain, etc.)	kwìyóówà	kòyóówà	kòòwà
565	take, carry	kòshòlà, kòkééŋkà	kòsòlà	kòhòlà
233	take off (clothes), undress	kòjóólà ntíílà	kòjóólà ntíílà	kòtùgólà
530	tangle	-	kòkàáŋkànìà	kòzùgà ?
898	taste (v)	kòlúlà	kòyóónzà	kòònzà
985	teach, instruct	kòmànìà	kòmànìà	kòlíŋgàsà
621	tears	míshòli	míshòli	mihóli
412	ten	kómi	kyómi	ikòmi
121	termite	àniŋéèù	mòsóà	mùfàà
739	testicle	tyòòmbò/ màtòòmbò	tyòmbò	ìtòòmbò
1020	that	ìyò	níásò, ìyò	ìyò
455	thatched roof	tèémbè	tyèémbé	ipàlà
767	there	òpò, òkò	òpò, kwáásò, páásò	òkò, ìtì
54	they	òyô	áàsìò, ìò	èènsò
444	thick, fat	gìnû	ŋgìnû	nènê
86	thicket *	shákà	shàkâ	ihàkà/màhàkà
854	thicket	shákà	nsàkòì, shàkâ	ìhàkà/màhàkà
619	thief	mwii	mwii	mìi (sg), ii (pl)
23	thigh (of human)	kìígâ, kìtàámbò	kìígà	kìnàmà

No	English	KĩnàUshòòlà	KĩníLààmbà Central	KĩnĩHàànzù
22	thigh (of animal)	kĩĩgà	kĩĩgà	kĩnàmà
559	thing	kĩĩntò	kĩĩntò	ĩntò
987	think, imagine	kòshĩĩgà	kòshĩĩgà	kòsĩgà
651	thirst	nóótà	nóótà	nyòòtâ
740	thorn	líígyà/míígyà	liigià/miigià	liijâ/miijâ
689	threaten	kwiyópòkyà, kòtùùmbà	kòtùùmbà	kòntìshà ?
532	three	kàtàtò	kàtàtò	itààtò
115	thrust into	kòkìnà	kòsòmà	kwààsà
420	tick (cattle or dog)	ŋkópà	ŋkópà	ŋkòpà
1034	tie (fasten) (vt)	kòtúúŋgà	kòtúúŋgà	kòtùùŋgà
258	tie up	kòtúúŋgà nà lókúsà	kòtùùŋgà nà lòlĩgì	kòtúúŋgà
978	tingle with excitement	kòzànzàmùkà	kòzwààmà	kòlòwà
119	tip, point	-	nsóòŋgè	nsòòŋgè
741	tobacco	tyúúmbàtĩ	tyúúmbàtĩ	ìtùmbàtĩ
146	today	nàntééndè	nàntééndè	lèlò
742	toe	lwáálà (nàlòkólò)	lwáálà lwà mùgòlò	lwààlà/nzàlà
445	tomato	ntòlè	ntòlè	nyáányà ?
105	tomcat (half-wild)	tyó	nílìlì	-
743	tomorrow	mùdááò	mùdááò	mùdàò
166	tongue	lòlĩmì/nĩmì	lòlĩmì	lòlĩmì/ndĩmì
120	tooth (canine), tooth filed to a point	-	-	-
267	tooth	líínò/míínò	liínò/miínò	liìnò/miìnò
306	top, peak	mpélò	nsóòŋgè	mígòlyà
293	tortoise	kíshìshóólò	ŋkólòkàkà	gòlôlágòlô
277	town	mújì ?	mújì ?	-
378	tramp of feet	mòkííndò	mùkííndò	kihìindò
270	travel	kòlóónjì' mùsíínzò	kòyééndà mùsíínzò	kòhègà
540	tree	kyòtà/màkòtà	kyótâ	mòtĩ/mìtĩ

No	English	KìnàUshòòlà	KìníLàámbà Central	KìnìHàánzù
538	tremble, shake (vi)	kòkìkìmà	kòkìkìmà	kòkàgàtà
566	trickle away	kòshòlòlà	kòsónòòntèkà	kòhóólà
401	trunk (of elephant)	mòkónò	kyòòŋgà	kàbíxò
604	try	kògèmà	kògèmà	kògèmà
605	tsetse-fly	ndòlóbò ?	ŋòŋò	mùnyimpápà
938	turn upside down, turn over	kòpìlòlà	kòkùnìkà	kògèòlà
174	turn round	kòpìlòkà	kòpìlímà	kòpìndòlà
711	tusk, elephant's (middle size) *	-	lòpéémbè	-
452	twin	mìintótì	mìntyótì	mìintótì
185	twist roll, spin with fingers	kòshòkòtà	kòpótyà	kòpèèmbà
483	twist, esp strands	kòpótyà	kòpótà	kòpòtyà
752	two	kàbìlì	kàbìlì	ìbìlì
18	udder	kìnènà	lòwélèlè	màèlê
945	uncover, reveal	kòkúnòkòlà	kòkúnòkòlà	kòkùnókòlà
551	unripe, half grown	tàkàtà	mbíísì	lòtììndì
994	unripe, uncooked	yíísì	mbíísì	mbìhí
311	up, above	kyáányà	kyáánìà	mìgólyà
614	upright	wíímìkà ké	wíímìkà	gòòlâ
446	urinate/defecate	kònìà, kòtòòndà	kòtóóndà	kònìà, kòtùùndà
745	urine	màtòóndì	màtòóndì	màtùùndì
569	use	kòtómìlà	kòtómìlà	kòtòmílà
307	utmost, highest point	mpélò	nsógònì	migólyà
904	vapour, gas	mòlòkè	mùlùkè	mùlùkè
380	vein	mòsípà ?	mùshípà wà mìgàlí	mùhìpâ
276	village	kìjíjì ?	kìsáálì	kìjíjì, kìsàlì
692	virgin (bride), girl	mùnáánsò	mùnáánsò	mùnáánsò
327	vision	ndóótì	ndóótì	ndòtì
330	voice, (thunder)	lólì	lòlì	lòlì

No	English	KĩnàUshòòlà	KĩníLàámbà Central	KĩnĩHàànzù
224	vomit	kwòlókà	kòlókà	kòlòkà
524	walk (take a)	kògèèndà	kòyóómbàòòmbà	kògèèndà
269a	walk	kògèèndà, kòlèéndà	kòlóŋgòlà	kòlòòŋgòlà
847	wall	gyélèlè	pyóópà	ŋkùtà
983	want, need, wish	kòtàkà ?	kòsìà	kòtákà ?
507	war	mbìità	mbíità	mbìtà
790	wart-hog	ŋgìlì	ŋgìlì	ŋgìlì
860	wash oneself (after evacuating)	kòkítyèèlà	kòtyèèlà	kìtèèntyà
127	wash (hands)	kòkálàlà	kòkálàlà	kòjà
128	wash (clothes)	kòkáánzà	kòkáánzà	kòpùà ?
129	wash, take a bath	kòyóógà	kòyóógà	kògà
322	water	máázì	máázì	màzì
959	wave, let off a trap, remove a spell	kòtégòòlà	kòlògòlà	kòlàgòlà
1017	we	ìshè	ìsìè	sèèsè
1010	weak	gòigòî ?	nèkétù	kònyèkà
881	wean a child, give leave, send away	kòtíishà	kòlèkyà	kòlékòòlyà
234	wear, dress	kòjáálà	kòjáálà	kòtùgálà
501	weave, knit	kòtúmà	kòtúmà	kòtùmà
1015	weight, rhythm	òlùtò	ùlùtò	òlìtò
210	well	lóózì	lóózì	lóózì
56	wet (get)	kòtòtà	kòtòòntà	kòtòòntà
919	what?	yáánì	yàánì	ntòònî
469	which?	nyíímbì	nìíì	ní òlí
192	whistling	mòlólì	mpìlíímbì	mòlòlì
175	white man	mùzúúŋgù	mùzúúŋgù	mùzúúŋgù
610	white	mwéélò	nzèlò	nzèlò
918	who?	wáánì	wàánì	nyàànyû

No	English	KìnàUshòòlà	KìniLààmbà Central	KìniHàànzù
28	wicked	-bí	mòlàándò	ìbì
339	wife	mòsóóŋgò	mòsóóŋgò	mòsòòŋgò
187	wind up (thread)	kòtáliiŋgìilyà	kòkóónzà	kòkòònzà
746	wind	nzègà	nzègà	ŋwèègà
937	winnow	kòpéétà	kòpéétà	kòpèètâ
112	wipe	kòpùtà ?	kòpútà ?	kòshàágólà
88	wire (brass)	-	wááyà ?	-
194	witchcraft	òlògì	òlògì	òlògì
279a	withhold from	kòìímà	kòìímà	kòìmà
279	withhold from, abstain	kòkíyìimâ	kòkìyíímà	kìimà
338	woman	mòsóóŋgò	mòsóóŋgò/ àsóóŋgò	mùkìmâ/àkìmâ
747	womb	ndà	íímbì	ndà, kìsòòŋgò
812	word	lòkáání/ŋkáání	lòkáání/ŋkáání	lòkàni/ŋkàni
772	work as a mason	kòjèèŋgà	kòzééŋgà	kòzèèŋgà
167	work (n)	mùlìmò/milìmò	mùlìmò	mùlìmò
81	wrap up	kògòòndà	kòyúnà	kòkònzà
344	wring (clothes)	kòminà ntíílà	kòmìnà	kòkàmòlà
773	yawn	kòyáòlà	kòyáàòlà	kàmáhà
593	year	mwáákà	mwákà	ŋwàákà
750	yesterday	ìgòlò	ìgòlò	ìgòlò
15	you (sing.)	òwè	òwè	wèèwé
1018	you (pl.)	ìnyè	ìnìè	nyèènyê
715	young man	sòòmbátì	mòlííshà	mùhòòmbà
637	your(s) (pl. 2nd) person)	yàànî	yàànî	nyèènyê
693	youth	sòòmbátì, mùnáánsò	mùsòmbátì (m), mùnàànsò (f)	mùhòòmbà , mùnáánsò
292	zebra	ndòólò	ndòólò	ndòlô

No	English	GíRwànà	GìÀhì	yínyàMùnyìŋànyì
133	abdomen, stomach, belly	ndà	ndà	ndà
495	abscess, boil	ìròòndà	ìyòòndà	ìpùRè
786a	abundant/abound	nyìì̀ŋgí	só	nyìì̀ŋgí, ìjòè
786	abundant	nyìì̀ŋgí	só	nyìì̀ŋgí, ìjòè
571	abuse, insult	òRòkánà	tòxànà	òtòkánà
252	abuse, reproach	gìxóà	jìémwà	òsògòsà
809	accustomed (get)	òzòéà ?	kòRáá	gìjívìà
274	act (vt)	òRèndà	kòtèndà	òtèndà
229	add up	òòŋgèyà	kòúŋkànyà	kòxòβíyà
927	adjacent (be); border (vi)	hòmbèyà	ògìíhwà	mìì̀mbì (n)
662	adze, carpenter's	sèèsò	sèèsò	sèèsò
254	affair	ìhànyò	ìì̀ntò, kìRòŋgà	ìhànyò, ŋxàànì
1002	afraid (be)	òòyófà	òòyòfà	òòyófà
168	agriculture	màlìmà	òlì̀mà	ìrì̀mà
926	all	nyòòŋè	-òòŋè	nyòòŋè
248	alter, change	fìì̀ndòà	-xàβìsyà	òxàβìsà
595	animal	mònyámà ?	ílímwàànà	-
617	answer a call	ìRíkà	ìRìkà	gìtíkà
782	answer, reply	sòkìà	súchà	òsúsà
664	ant (reddish-brown biting)	nyèlì	nyèli	nyèèrì
122	ant-hill	gìyòò	gì̀yòò	gìgòò
663	ant (small)	-	sòóŋgwì	ànyìŋkòòŋgò
586	anvil	-	ìnòòlèò	ìgwè ló tyàánìà
989	apply by stretching, spread over	Ràntàyà	xòmèkà	òkòmà
976	appoint, set up	ìmíchà	ímìchà	wàRèmwâ
55	arm, hand	mòxònò	mòxònò	mòkònò

No	English	GíRwànà	GìÀhí	ɣínyàMùnyìŋànyí
771	armpit	kwàáfà	kwàáfá	gìnyàŋkwápà
203	arrange, put in order	fàáŋgà	nìŋànììyà	ònìŋànìyà
204	arrange, put right, repair	Rèndà	chàándá	òsókìyà
478	arrive	òjà	rèà	òfikà
665	arrow	ìRùùmbò	ìRùùmbò	mòòβyè
666	arrow (head of); spear head	mòyɨ, isòmò	mòyɨ/mìyɨ	sòòŋgè
337	ashes	màù	màù	màù
199	ask for	ròòmbà	óómbá	òròmpà
89	assemble, collect (vt)	kòsànyà ?	kònìŋànììyà	òkòβíyà
789	aunt (father's sister)	íò á RáRà	màámà	íjó mùhàjá mwàRátà
148	avoid, dodge	òrèkà	òRòRò	òRánà
688	awe, fear of God	òyàànjà	-	gòògóɸà
667	axe	gèhèèndò	gèhèèndò	gìhèèndò
364	baboon, ape	mpóómà	mpóómà	mpómà
634	back of (at the)	nyùmà	nyùmà	ònyùmà
297	back	mùɣòòŋgò	mùɣòòŋgò	mùɣòòŋgò
297a	backbone	ìshìná mùɣòòŋgò	ikùfá yá mùɣòòŋgò	ìkùfà múɣòòŋgò
27	bad	mbí	iβí	mbí
37	bad (become), rotten (vi)	òɣòlà	ɣòòrà	òɣòrà
87	bait	-	mùnyòɣóyà	gìxòòŋgéyò
398	banana (plant)	mògómbà ?	mùdísì ?	mògómbà ?
397	banana (fruit)	ndìzì ?	ndísì ?	ndíízì ?
399	banana (for cooking)	ndìzì ?	-	-
1005	baobab	mwáándò	mwàándô	mwàándô
1022	bark (of tree)	ibàdá	ìbàádá	ibàdà/màbàdà
313	barren (of living being)	mùɣòòmbà	ntàáhà	ntàhà
314	barren (of land)	chíímà	òxàxò	ibàámbáhì
376	base of tree-trunk	ìRínà	ìshííná	ìtìnà

No	English	GíRwànà	GìÀhì	ɣínyàMùnyiŋànyi
650	bask (in the sun), warm oneself	òòRá	òòRá	kòòRà
576	basket of open wicker-work	àkáfù	gìxáfù	-
577	basket (plaited)	káfù	gìxáfù, káɸò	ìkááɸò
643	bathe	òòɣá	óóɣá	gòògà
498	be fitting, behove	ìdáìkè	nònééyá	nònèèyà
1	be, become	óRèndèèkà	òjó òhèndèèkà	ò
955	beach, coast, shore	mpwàànì	mpwàànì	mwàáɸò
827	bead(s)	nàáŋgó	gììntò	gììntò
416	bean, kind of bean (from *Phaseolus vulgaris*)	ŋkòsà	ŋkòsà	òkòsà/ŋkòsà
417	bean, small (from bean plant)	màhàràgè	màhàràgè	màhàrágè
844	bean (runner)	mòŋkòsà	ŋkòsà	òkòsà/ŋkòsà
1037	bear child	òfàáfà	òfàáfà	òRùŋgóká
147	beard	ndèù	ndèù	ndèù
768	beat	xòßà	xòá	ókùßà
759	beautiful	njìjà	òòjá (fèmàlè), òhòòmbà (màlè)	njìijà
162	bed	ɣìRándà	gìRándà	gìRándà
161	bedstead	iRèndégù	gìRándà	òríì
653	bee	njòòkí	njóókí	njóókí
775	beer	ntóí	ntòí	ntóì
497	befit, suit	ìnónè	nònèèyà	ònònèèyà
101	below, underneath	hàáŋè	hááŋí	fàáŋè
186	bend, twist (vi)	fììndà	-bììdà, fiindà	gìkúnyá
468	bend (vt)	fènèèntà	-bììdà	òkùnyá
193	bewitch	ròɣà	òròòɣà	òlòɣà
930	bifurcation, cross-roads	mpásà	-	màtàɣáníò à njíà
222	bile	mpòòndò, gìsòòŋgò	kìsòòŋgò	ntóóndó
262	bind up, splice	òɣàáŋgà	òràɣòà	òtàßíhà
658	bird-lime	ònììmbò	ònèèmbò	ònìimbò

No	English	GíRwànà	GìÀhì	ɣínyàMùnyìŋànyì
811	bird	nyòònyì	nyòònyì	nyòònyì
46	birth (give), to a child	òfààfà	òfààfà	òfààfà
125	bite	òrùmá	òrúmá	òrùmà
221	bitter	nyòòŋgò	ndòlò	ndòlò
223	bladder	ìhòrò	ìhóró	-
482	blind person	mùfòkù	mòfòhù, mòɸòkù	mòpòkù ?
669	blood	sàɣàmì	sàɣàmì	sàɣàmì
496	blow on, blow up	fèmbérà	fémbéyá	ùfèmbérà
238	blow bellows	òkùnùntìyà	òfémbéyà	-
463	blow away	òrùmyà	-	òsèsééryà
776	boast, brag, praise oneself	ògìRéndà	ògìhómyà	gìɣónjà
676	boat	-	-	-
670	body	mòβì/mwìrì	mwìlì	mwìrì
581	boil up	òRàɣàRà	chófyà	wókìrà
30	boil (vt)	chófyà	chófyà	òchófyà
433	bone	ìkùfà	ìɣúfá	ìkùɸà
564	bore a hole	fèɣèhà	dóóŋká	òbòórà
1008	born (be)	fààfwà	fààfwá	òɸààɸwà
910	borrow	òkòfà	òɣòfà	òkòpà ?
872	bottle	chòófà	chóófà, chòóɸà	chòófà
928	boundary	mòfáákà ?	mwfímbí/mfímbí	mìmbì
671	bow, bending	ìkònjiè	òRà	òtà
508	bow	òRà	òRà	òtà
953	bowstring	òɣòhè	òɣòhè	òɣòhè
58	brain	wàáŋgwè	wàáŋgwé	wááŋgwé
509	branch	isàánjà	isáánjà	isàámbì
375	bread	mùkátè	mùxátè	mùkáátè
831	break wind *	òhùrà	òhúá múndíísò	wèhéérà ùnyùmà

No	English	GíRwànà	GìÀhì	yínyàMùnyiŋànyi
77	break, snap	ùnà	ǒbèlóà	ǒyùnááŋgà
1036	break wind	ǒhùrà	ǒhúà	ǒhùrà
17	breast (of a woman)	mbéè	ìvéè, ǒvéè/màvéè	màànyà
489	breath, breathing	mwààhò	èhéà	mwááhó
490	breathe, rest	gòhèà	èhéá	gòèhéà
138	bridge	ìdàlájà	ìdáájà/màdáájà	tààmbókò
139	bridge (wooden)	ìdàlájà là màRì	ǒRámbókò	tààmbókìlò
885	bring, fetch	éRà	éRà	lèétà
171	bring to light	ǒmànyìkà	wéélyá	dòìyà, kùmóà
882	bring up (a child)	ǒrìà	ǒrêà	ǒrêà
660	brook, stream	gàyòòŋgò	gàmòòŋgó	gàyòòŋgò
942	broom	ìfyáyǒrìrò	ìfáyǒò	chágìrò
113	broth	mìhòlì	màhòlì	mìhòrì
381	brother-in-law, sister-in-law	mòlàmò	mwáámú	mwàmwánì
341	brother (older)	múúnà ní mòkóó	múúnà, mùùnà	mùùnà nì mùhàjà
673	brother, relative, fellow-tribesman	mùnyàndóyò	múúnà, mùùnà	mùnyàndóyò
874	bruise badly, take the skin off	ǒsìnòkà	sìfóá	ǒsǒyǒkà
71	buffalo	mbòyó	mbòyó	mbóóyò
807	build	ǒjèèŋgà	ǒjèèŋgà	ǒjèèŋgà
674	bull	njàyámbà	njàyámbà	ŋkàámà, njàyárnbà
80	bunch (of hair)	màtiiŋgà	-	ìpágàtìè
890	burden, load	mòlìyò	mwìlyó	mwííyó
645	burn (vt & vi)	gwàákà	ààxá	gwàáchà
231	burnt (become)	ǒrǒŋgòrìrá	lífyá	ǒpyâ ?
179	bury	ǒβìíkà	fíhá, íxà	ǒβíkà
555	bush	ìyàákà	ìhàáxá	ìhàká
21	buttermilk	màáyà	màé ní màlòlò	gìŋkàándà

No	English	GíRwànà	GìÀhì	yínyàMùnyiŋànyi
514	buttocks	ìRààxò	ìRáyó/mRáyó	ìtàkò
301	buy	ùyùrà	ùyùà	ùyùrà
873	calabash	ŋùùfà	ŋúúfà	ŋùùɸà
857	calf of the leg	ùsààkù	ùsáxò	ùsààkù
877	calf	máŋòòmbè	ndààmá	mwáŋòòmbè, mùdàmà
31	call	gìRánà	ììRá, fíRáná	ùtáánà
675	canoe (dug-out)	ŋgàlàwà ?	ŋgálàwà ?	-
602	canoe	mùtúmbwì?	ŋgálàwà ?	-
993	carry a child on the back (in a blanket)	ùfàfá	fàáfá	ùyèèkà
567	carry/lift on to head (take up) a heavy load	gìRíkà	gìRwíká	gìtíkà
97	carry astride on the hip	ùxwáRìrà	ùxáRìà	ùkìndìkà
560	carry, take	kèèŋkà	ùhòrà	ùkèèŋkà, ùhòrà
578	carry, convey	kèèŋkà	-ùRóà	ɸééyà
104	cat	nyáù	nyáù	nyáù
286	cattle	mìRíyò	mìfúyó	mìtùgò
486	cease, finish	hìirà/sìirà	híá	hìrà
526	centipede	xùmí à Ryánà	ŋxùmí yàfiánà	-
247	change, turn round	fòndòkà	gìfyìRùhìryà	ùsókà gìnyúmà
334	charcoal	màxàà	ìxàá/màxàá	màkàà
963	charm (esp. to ensure wife's fidelity) (n)	gìsòmbà	mùRéyò	ùsìndíkà
32	chase (away)	jùnchà	jùnchà	ùirà
515	cheek	ihàyà/màhàyà	kùùndà, ŋààyà	màhàyà
92	cheerful (become)	-yàànjà	-yàánjà	bìĩhè ?
106	cheetah	ŋùòvì	dúmà	-
585	chest	gìkùà	gìxùà	gìkùβà
672	chest (of animals and birds)	gìkùà	gìxùβà	gìkùβà

No	English	GíRwànà	GìÀhí	ɣínyàMùnyiŋànyi
431	chief, headman	mòkòó	mònyàmpàà	mòRèmì
431a	chief	mòRèmì	mòRèmì	mòRèmì
679	child, infant	mwàànà	mwáánà, mònìnyà	mùjìimbà, mwàànà
597	child, offspring	mwàànà	mwáánà	mwàànà
886	chin	gìdèù	gìdèò	gìdèù
83	choose	hòànìà	gòhòànìà	òhòònìà
109	civet cat	-	ntùùŋgò	ntùùŋgò
255	clan	mwàáŋgò	mòfíRà	òkóò ?
841	climb, ascend	nàntìà	nàntìà	-
550	clod, lump	ikíŋkì	ìlòòŋgò/màòŋgò	ìròòŋgò, yòòŋgò
851	close (the eyes, mouth, etc.)	RùRyà, mùmùŋkà	òRùRyà	òtùtyà, ògìryá
299	cloth	gìRàmbàà	gìRàmbàà	gìtàmbáà
235	clothe	Ryíchà	òyáà	gìtùùŋgà
300	clothes, material	màsàà	ìsàà/màsàà	ìsàà
305	cloud	ìrùùndè	ìyùùndè	ìrùùndè
817	coagulate	kwáRìrà	òmíírà	òméérà
941	cobra (spitting)	mwìílò	mwíílò	mwìírù
906	cohabit	ímbòyà	òráá	wìtómbyà, òtàɣánà
465	cold	òryòkû	mpèɸò	mpééɸó
624	come	òjà	òòjà	òjà
505	come on suddenly, take in the act	òháŋgììyà	òhàŋgììyà	wàhááŋgìyà
230	construct, put together	òómbá	òRèndà	òRèndà
471	cook	òrùyá	òRéxà, òrùyá	òòyà
557	cook in water or fat	òRàxáRà	òRéxà	òtàxàtyà, òchòvyà
43	cooking pan, small	gìháŋgò	nyòòŋgó	-
385	cool (become); get well	òryòkà	òryóhá	òlyòòkà
265	copper, brass	shàbá	-	-
283	copy a pattern	sókèrà	òhónjyà	òhòònjà

No	English	GíRwànà	GiÀhi	yínyàMùnyiŋànyi
894	cork, stopper	mùkùníkò	mùfùníkìò	kìvíírò
52	corpse, carcass	mwìimbà	mwíímbá	gìbúdù ?
1001	corpse (human)	mwìimbà	mwíímbá	mùvìimbá
383	cough (vi)	òxóóâ	òxóórà	òkòórà
4	count	βàlyà	βààlyà	òβàryà
100	country (our)	ŋíí	nyí	ŋè
14	courtyard	gìwánjà ?, òkòómbì	mòsáè	mòséè
852	cover (up)	kùníkyà	òfùníkìà	òkùníkìyà
285	cow	ŋòòmbè	ŋòòmbè	ŋòòmbè
1003	coward	mwòòβá	mwòòβá	mwòòβá
335	crab	-	ndèyèyè	-
520	crawl, creep	-	ààlúà	kùúrà
612	cricket	-	nyéénjé	nyèènjè
153	cripple	òrèmìè	gìlémá	gìrèmà
803	crocodile	máámbá ?	-	-
319	cross (a river)	òRàmbókà	òRámbóxà	òtàmbòkà
846	crow (n)	ŋkòŋgóò	ŋkòŋgóó	ŋkòŋgóò
308	crown of the head	bòsà	bóósà	bòsà
79	crumple	òmìnyàáŋgà	òhòáŋgììyà	-
370	crush by pounding, pulverize	òfòòndà	òRùáŋgà	òtòrà, òfòòndà
393	crust	màxòxò	màxóxò	ìkòkò
160	cry, wail	kòrà	òlìà	wíírà
966	cucumber, small	màyòóyò	iRàáŋgò	miímbè
736	cudgel	ifìnì	ihíní	ifíní
165	cultivate	òrìmà	lìmà	ìrìmà
950	cure, cool, heal	òryòòchà	ùfòòrya	òɸòòryà
355	cut	Rèmà	Rèmà	òRèmà
98	cut, lop	òniŋàníìyà	òRèmáŋgà	òɸèèŋgà

No	English	GíRwànà	GìÀhí	ɣínyàMùnyiŋànyi
117	cut to shape, sharpen to a point	òsèsà	òsèèsà	òsèèsà
365	dance (of men, to show courage)	òɣìiná	òginísyà	ìmáà
53	dance	òginà	òginísyà	òginá máwííndì
622	dark, black	jóríkì	-iìlò, njiilò	jóRiki
481	darkness	kiiRi	kiiRi	kiìti
824	dawn (vi)	gwàcháà	òòchá	dìó ní ŋkòó
359	dawn, daybreak	gwèráà	màèléò	òchéérò
744	day after tomorrow	iŋkíò	hiŋkíò, kìshíò	ɸùŋkíò
130	day	iRìkó	ìshìixó	iRìkò
682	day-time	mòòmwì	mòòmwí	mùùmwì
869	day (all)	mòòmwí wòóŋè	mòòmwí wòóŋè	mùùmwí wòóŋè
751	day before yesterday	ijòòlì	ijòì	ijòòrì
423	dead person	mwiìmbà	mwìimbà	mùkùyù
424	death	ŋkùyà	ŋkùùyà	ŋkùyà
931	decorate	òɲónèyà	òxósànsìà	òɲónèèyà
446a	defecate	òɲìà	òɲìà	òɲìà
631	denial	ixáná	òxánò	òkàánà
821	deny	òxánà	òxánà	òkàánà
648	destroy, spoil	òlùβààŋgà	òrùvà	òrùβààŋgà
437	dew	lòómè	lòòmè	lòòmì
219	die (cause to); put to death *	òráɣà	òràɣà	kònóà
1027	die *	kùyà	kùyà	kùyà
425	die	kùyà	kùyà	kùyà
504	dig up, dig out	kúrá	òhùà	òkùrà, òhìimbà
503	dig	hìimbà	òhìimbà	òkùà
466	diminish, grow less	kèéfà	òxèfà	kéépà ?
635	dip	sóómbyá	òhóómbyá	òsíníyà
49	dirt	ìxwè	ìxwè	mpàárà

No	English	GíRwànà	GiÀhi	ɣínyàMùnyiŋànyi
680	district, province, country	ŋìì	ihòòmbì	-
245	divide	ɣàànià	òɡáwà	òβàɣànià
512	divorce	lèká, òchùùnchà	gìréká	gìréká
367	do, complete, finish	hiiryà	òmèèyà	òmèèyà
366	do	Rèèndà	òRèèndà	òRèèndà
60	dog	mbwá	mbwá	mbwá
292a	donkey	ndòòɣwé	ndòòɣwé	ndòɣwè
685	door	gìnyàmwááŋgò	gìnyàmwááŋgò, ròòli	ryòòryè
415	dove (red-eyed)	kòòrwé	ŋkúúndà	ŋkòòrwì
188	doze	òRìndíyà	òRííndíyá	òtìndíyà
529	draw water (from well)	òRàfá mààjì	òRàfá mààjì	òtàfá mààjì
215	dream (vt, vi)	góRèà	òóRèà	gòótèà
328	dream (n)	ndòòRì	ndòòRí	ndòòti
448	drink	nywá	ónywá	nywá
196	drizzle	isìsìi	isíísí/màsíísí	màsísiírà
780	drop, throw down	ìichá	òhàà	òkàà
284	drum	ŋgòòmà	ŋgòòmà	ŋgòòmà
598	dry (vt), set out to dry	ànìkà	òànìxà	gòànìkà
346	dry	ŋkàkù	xààxù	ŋkàákú
954	dry up, ebb	fwéhèrà	òmírà, òɸéhèà	gòkéɸà, gìrúkà
345	dry up, become dry	òòmá	òóómá	góómá
289	duck	mbàáRà	mbààRà	mbàRà
243	dust, cloud of dust	òpòòŋgò ?	òhòòŋgó	òkòòŋgó
628	dwell	ìhà	gògíxáá	gìkàà
492	eagerness, zeal	lòòmbè	ŋkóómbó	pàxà ?
491	eagle, bird of prey	-	-	òsèèntà, déédé witùùmbò
563	ear	kòRwì	gìRwí	ikòRwè
70	earth, land	fááŋí	fááŋí	ŋè

No	English	GíRwànà	GìÀhí	ɣínyàMùnyiŋànyi
44	earthenware vessel for serving up food	chòòŋgó	-	chòòŋgó, kɨpàkóɨlò
156	eat	òlá	òòlyá	òlà
900	effort, exertion	pàámpàhò	mwìiRómí	ŋgùù
273	egg	ilyè/màlyè, ìɣì/màɣì	ɨɨɣí	iryè/màryè
443	eight	mùnàánà	mùnáánà	mùnàánà
705a	elbow	ixòxóà	gɨhóhóà	gɨkòkóà
329	elephant	njòù, njòɣù	njòù	njòù
336	embers	ixàá	ixàá	ixàà
842	embrace	kùmbáRià	gòxùmbàtɨà	kòmbàRià
394	end (come to an)	hòòndyà	hóóndyá	kwííyà
952	escape, recover	fòrà	gòfòá	òɸòrà
899	examine, measure, test	ɸìimà	òfíímà	gɨɣàànjò ?
45	excrement, dung	màbì	màábí	màábì
958	exorcise, drive out a devil	hèyà	-	gihimà
784	explain	òtlɨɣìRyà	òhànyà	gìigityà
620	eye	lìihò/mìihò	lìihó	rìihò/mìihò
828	eyebrow	ntòká, ligòòntò á mìihò	ŋkóómbó	ŋkòòmbò
838	eyelash	ŋkòòmbò	ŋxófyò	òkòɸè
587	face downwards	ráá nà ndà	òràà ɨ ndàándàà	rérà ndà
686	face	òsyò	òsyó	òsó
940	fade, disappear	òfidélé βijà	òRòRyà, òilóólyà	ònywérà
891	faint, lose consciousness	wàkilâ	òhòyá, ŋkiíshi	òwíírwà
298	fall	-gwà	òògwà	ògwà
549	fall short	-kééfèwà, kèèfà	òxééfâ	òfèérya
462	fan, wave	hèndèèlyà	òhèhéà	-
764	far	kùlèŋgì	xwèèŋgí	kwèèŋgì
921	fat (be) (of animals)	rènyiè ?	òɣìnà	òɣìnà
922	fat (of animals)	rènìè	ɣìnú	ɣìnù, ɣìlù

No	English	GíRwànà	GìÀhì	ɣínyàMúnyìŋànyì
531a	father	RàáRà	RàáRà	RàáRà
382	father-in-law, mother-in-law	mùxwè	mùxwè	mùkwè
531	father (my)	RááRà	RàáRà	RááRà
687	fear	wòòβà	wòòβà	wòòβà
652	feathers, fur	njòòyà	màjòòyà	màβʊ̀rì
848	fence, enclosure	ìkìRà	mòsáè	ìkíRà
858	ferment, turn sour	ʊ̀sàsà, ʊ̀tʊ̀là	ʊ̀sàsà	ʊ̀sàsà
762	few (a), not much	kééʊ́	xìì	chèèβʊ̀
757	fierce, sharp	xàlì	ífɣí	xàlì
421	fig-tree	-	-	-
422	fig-mulberry tree	-	-	mʊ̀kʊ́yʊ̀
216	fight	ɣìxʊ̀βà	ʊ̀ɣìxʊ̀à	gìxʊ̀βà
804	fill	gìjʊ́yà	gìjʊ́yà	gìjʊ́yà
176	fill a hole, stop up	gìjʊ́yà	ʊ̀xìRà	ʊ̀givyà
583	filter, strain	ʊ̀fènéntà	ʊ̀xàmà	ʊ̀kàmà, ʊ̀kènénà
50	filth	mààntú	mpàárà	ìpàárà/mpàárà
516	final, decisive	ʊ̀dàhà	ìhùnìiyò	àfikèà ?
760	fine, excellent	ìjà	njìijâ	njìijà, ŋʊ̀ʊ̀mbà
447	finger	mwáchà	mwàáshàà	chà
323	fingernail	ʊ̀kúkù	ʊ̀hùúhù	ʊ̀kùúkù
474	fire	mòòRò	mòòRò	mòòRò
280	fireplace, hearth, kitchen	ʊ̀rìkò	ʊ̀jíxò, màfíwá	rìikò
970a	firewood (collect, cut) (vt)	ʊ̀Rényà	ʊ̀Rényà	ʊ̀ténya ŋkwì
413	firewood	ŋkwí	ŋkwí	ŋkwì
191	fish up, pull out	ʊ̀héyà	ʊ̀sʊ̀mbʊ̀à	ʊ̀kʊ̀ʊ́rà
126	fish (old Swahili *nswi*)	sàmákì ?	sóómbá	sóómbá
190	fish (vt), trap fish	kwàRà	-	ʊ̀kʊ̀ʊ́rà
400	fist	ŋkùùndì	ŋxòòndè	ŋkùùndì

No	English	GíRwànà	GìÀhí	ɣínyàMùnyiŋànyì
525	five	ìRáánò	ìRáánò	ìtàánò
493	flap wings wildly, flutter	ìkùnùúntà	òxúáŋgà mbàáyá	òrùmà
832	flatulence	ndà ìjwè	òbèòxà	ògìòkà
384	flavoured (be properly)	ìkwàRyè	òxòléà ?	nòɣwéérà
907	flower	ìúà ?	séémbé, ìúà ?	-
278	fly (house)	ŋgìì	ŋgìì	ŋgìì
1028	fly (vi)	òrùmà	òrùmà	òrùmà
1032	foam *	ìfómbóú	ìfòòmbòò	ìfóómbólú
502	foam	ìfómbóú	ìfòòmbòò	ìfóómbólú
143	follow (in order)	-hòòŋgà	-sààmbìyà	gìhóóŋgà
142	follow	-hòòŋgà	gìhóóŋgà	gìhóóŋgà
823	food supply for a journey	màhááŋgù	màlífwá á múhìinjò	màhááŋgú
556	forest	ìhàáká	ìhàáká	ìhàkâ
584	forge	òRyánà	òfyàánà	òtyàánà
889	forget	gìɪ̀wà	òvíRà	gìɪ̀ßà
458	fork, bifurcation	mpásà	gìfwàándwá	màkòkò
442	four	ìínè	gánè, ìínè	ìínè
295	frog	ntòòndò	ntòòndwí	ntòòndò
574	fruit	ìtùùndà ?	-	-
349	fry	òxàáŋgà	òxàáŋgà	òkàáŋgà
936	fully developed, be	òxòmáà	òwèèndà ò njí (m), òhyá òɲùùmbá (female)	òkòrâ
625	full (become)	ìjóà	ògìjóà	gìjóà
316	garden	bùsìtáàni ?	bùsìtáàni ?	njérá
419	gather (flowers, fruit)	òxàà	òxàà	òkàà
91	gathered (be), assembled (be)	gèèŋgérà	ògìhóàŋgɪ̀ìyà	gìhááŋgòyà
368	gazelle (Grant's)	sàsóŋgà	-	mpáá
454	gazelle, small (impala)	mpàà	mpàá	mpáá

No	English	GíRwànà	GìÀhí	yínyàMùnyìŋànyi
108	genet (kind of speckled civet cat)	ntùùŋgò	ntùùŋgò	ònyèèŋgwè
408	get, obtain	òhàáŋgà	hàáŋgá	òhàáŋgà
684	ghost, sudden apparition	màRòmbóká	-	dwííyà
568	giraffe	ntìíyà	ntìíyà	ntìyà
246	give away (present)	òdòòyà	òfùnyá (dàáhwà)	òdòyà
449	give	pá ?	òfá	dóóyà
916	give light to	mwìíkà	òmòòlìíxà	òmwìíkà
815	glide, trickle	sèmèèmpà	òsàmáámbà, òsènéémbà	òsèméémpà
269	*go*	*-èèndà*	*òwèèndà*	gwèèndà
639	go in, come in, enter	iŋgìà	òxyá	giŋgíyà
63	goat	mbòlì	mbólí	mbòrí
694	goat, (he-)	mpáhì	ŋgùàRà	ŋgwààRà
695	god	màlòòŋgò	màòŋgó	mwàtúúndà
758	good	njìjà	òòjá	jìyànà
388	goshawk (East African) (*Astur tachiro*)	òsééntà	-	mpàfìyànà
68	grain (of cereal)	mpèèkè	mpééxé	mpèèkè
696	grandfather	kókò	xóxò, ihè xóó	kòókò
697	grandmother	màxìkòò	ìnyè xóó	nyìnyàkóó
432	grasp, hold in arm	kùmbáRyà	xúmbáRyá	òkùmbátìà
698	grass, reeds	màhwà	màhwà, màráŋìimbá	màhwà
406	grate	kwàárà	òxwàárà	kwàáryà, kwàràáŋgà
409	great, powerful, big	kóó	ŋkóó	ŋkóó
164	grief, sorrow	òhwèRè	siimbá	-
371	grind (grain with a millstone)	òsyà	òòsyà	òsyà
372	grind coarsely	òfàárà	òfáárá	kòòryà
212	groove, furrow	gàhòmbó, gàyòòŋgà	-	màkwíírà
801	ground, cultivated	màòndà	màyòndá	màòndà

No	English	GíRwànà	GìÀhí	ɣínyàMùnyiŋànyì
405	grow up, get large, become great	kòrá	òxòá	òkórà
913	grow (of plants)	bòhà	òxòá	òkìindà, òkòrà
461	grown (be fully)	RàɣàRà	òxàmá	wihókià
373	gruel, light porridge	ŋxóómbà	ŋxóómbà	ŋkòómbà
358	grunt, grumble	-	òxlééyà	òɣòβà
205	guide aright	Ròŋgèèrá	òlóógyà	òRòŋgéérà
351	guinea-fowl	ŋxààŋgâ	ŋkàáŋgá	ŋkààŋgà
701	gun	bùndúúkì ?	ìgòbólè ? bùùndúkì ?	-
702	hair	òRúkà/ntúkà	òjfì	òtùkà
977	hair (long straight- of animals and Europeans)	ikìiŋgà	-	gàkìiŋgà/màkìiŋgà
75	hair (white, grey)	mbùyì	mbúyí	mbùyì
703	hand (flat of)	ìɣànjà	ìxófì	ìkóɸì
157	hand, right	gìlílò	gìlílò	gìlílò
439	hand (left)	gìmóhò	gìmòhó	gìmóhò
476	handle, haft	mòfìnì	mòfìnì	mòɸìnì
779	hang in mid-air	òniŋìniyà	-	òniŋìnà
655	hard	ŋkákù	xáámú	ŋkàkù
377	hardship, distress	òkàkù	ùxáxú ?	sááyô, síídà ?
294	hare	múnyàŋgàà	mùnyàŋgáà	múnyàŋgàà
781	haste	àŋgòfà, wàáŋgwà	àáŋgófá	gwàáŋgò
795	hate, detest	òhórà	òhówà	òhórà
700	hay	òbàbáli/màbàbáli	màhwà ní màxáxò	màhwà màkàkù/níòmíè
678	head, chief person	mòkóò	mòxóó, mòRémí	mòkòò
356	head	iRwè	iRwé/màRwé	ìtwè
352	head-pad	ŋkàRà	ŋxáRá	ŋkàRá
561	heap	ìrùùndò	ìùndò	ilòòndò

No	English	GíRwànà	GìÀhì	ɣínyàMùnyiŋànyi
391	heap up, ready/set on fire	fèèmbérà	Rèndá mòòRò	òRèndà, òfèmbéérà
623	hear	Rààyà	Rèɣèà	Règéà
543	heart	ŋxóó	ŋxóó	ŋkóó
944	hearthstone for putting pots on	màfiɣwà	ìfíwá/màfíwá	ìfiɣó/màfiɣó
893	heavy, serious, dull	ìrìRò	ndìRò	ìrìtò, ndìtò
705	heel (of foot)	gìRìgìnò	gìRíŋínyò	gìtiŋínyò
681	heifer	ndàmá à ŋòòmbè	-	mùgòyò
418	hem, make a border	bìtìdà	òRùmà, òhùnjá ìsàà	òkònyà
690	hen, fowl, chicken	ŋkòkò	ŋxóóhó	ŋkòòkò
766	here	àfà	háfái, húkó	àɸâ
863	hiccup	-	ŋkiíshi, ŋkiíçi	gìhékúmwà
800	hide (vt)	fiihà	òfíhá	òbiɲà
38	high, be (of meat)	òɣórà	òɣúúndà	òɣòrà
326	highway	bàlàbálà ?	njìà, bààbáà ?	ìbáárà
309	hill	òɣòòŋgò, gìɣòò	gàgìRààntò	gàRùmbì
925	hip	ŋkùnù	-	nyòòŋgé yà gìnàmà
317	hippopotamus	ntòmòòndò	ntòmòòndò	ntòmòòndò
396	hit with a hammer	óRòà	òxòá nyùùndò	òtùrá nà nyùùndò
706	hoe	ikòòjò	ìxòòjò	ikòjò
990	hold, arrest	òxwááRà	òxwááRà	òkáRà
575	hole, nest	ìhòòmbò	ìbóyó/màbóyó	ìkòòmbò
836	hollow out	òkùlà	-	òkúrà
816	home	òxìRù	òxítò	òɲíítò
654	honey	òòkì	róóxí	òòkí
150	honour	-	-	gògóɸà
797	hook (for pulling down branches in plucking fruit)	ŋwáádà	ŋwáádà	ŋgwàádà
189	hook (fish)	ndòánà	ndòánà	ndòánò
707	horn, ivory, tusk	òfèémbé, mpèémbé	òfèémbè	òɸèèmbè

No	English	GíRwànà	GìÀhí	ɣínyàMùnyiŋànyì
288	horse *	fàràsì ?	fàrásì ?	-
708	house	nyùùmbà	nyùùmbá	nyùùmbà
263	how many?	ííŋgà	ííŋgà	ííŋgà
572	hump (of hunchback)	gìkúkù	mpòòkù	gìkùùkù
573	hump (of cow)	gìkúkù	gìxúxú	gìkùùkù
756	hundred	ìɣànà	ìɣànà	ìɣànà
320	hunger	njàà	njàà	njàà
33	hunt	òsèèmpà	òséémpá	òhèdà
34	hunter (professional)	mòsèèmpì	mòséémpí	mòhèdì
35	hunting	òsèèmpì	òséémpó	òhèdò
227	husband	mùɣósyà	mòɣósyà	mòɣósà
808	hut	gàdímù	ŋxààŋgò	ìkùùmbù, gìβàándà
709	hyena	mpìRì	mpííRí	mpìtì
1016	I	nɪ̀ɪ̀nɪ̀	nèènè	nèènè
1013	idleness, sloth	òxàró	òRòRò	wèènyè
901	ill (be); groan	òlwá	òrwáá	òrówà
902	illness, (crippling)	òlwá	òrwíí	òrwè
275	imitate	ìɣèyà	wɪ̀ɪ̀yèyà	gìyéèyà
16	in front of	nsòòŋgè	òsòòŋgé	nsòòŋgè
353	in the middle of	mùxàRì	mùxáRì	mùxàRí
118	incite	gòhòŋgèèryà	òhòòŋgèèyà	hòŋgèèryà
206	increase, make greater	òŋgèèyà	òòŋgèèyà	òŋgèèyà
155	increase	kìyánìyà	kìjóà	gìjóyà nààŋgò
426	inheritance	òrékèwà	-	òsài, sàò
542	inside, in	xàRì	mòòŋì	mùxàRì
353a	inside, middle	mùxàRì	mùxàRí	mùxàRì
132	intestines	ilà/màlà	mààlà	màlà
389	intoxicated (get)	òɣàà	òɣàà	òɣàà

No	English	GíRwànà	GìÀhì	ɣínyàMùnyiŋànyi
513	iron ore	màgwè nínà ichòòmà	màgwè nínà ichóómá	-
264	iron	ìcòòmà	ìchóómà	ichòòmà
710	island	gàŋgé nìí gíràámbò	-	-
2	itch	gwààɣá	wáɣáá	wààɣà
460	jammed (become)	kwàámà	kwàámà	òxáRìwà, òxáRìà
853	jaw (bone)	ihàyà	òhàyá/ŋààyá	màhàyà
960	jealousy	gìxò	wìílú	wìírù
271	journey	mòhèènjò	mùhíínjó	mùhèènjò
606	judge (vt)	òràmòà	òàmùà	-
810	jump, leap	òhàŋkíyà, ònàŋkìyà	òlímà	òrìɣìmà
477	kidney	mpìɣò	òfìɣó/mpìɪɣò	mpìɣò
218	kill	òòláɣà	òòláɣà	òòráɣà
677	king	mùRèmì	mùRémí	mùtémì
787	kite	òsèéntà	òsééntà	òsééntà
347	knead	òfiŋgííRyà	òmìnyà	òxàándóɣà
348	knee	ìlù	ìlú/màlú	irù
427	kneel	òxòá màlù	òxòá màlù	òRùŋgámà
607	knife	lòfyò	mòyí	ròfyò
402	knife, thin, curved, broad-bladed	lòfyò wá mpìimbò	njòòlò	njòòlò
704	knot	ìkùùndò	ìxúúndó	gìfòrà
626	know	òmànyà	òmànyà	òmànyà
178	lake	ilàámbò	iyàámbò	yòòŋgò
151	lame (be)	sùŋkíyà	òsúŋkíyà	òsùŋkìyà
511	lamp	gìmwì, Ráá	gìmwìì, Ráá ?	gìmwììkò
99	land (dry)	ŋí nì ŋkàkù	fààŋí ní ŋkàxò	ŋí ŋkàkò
761	large, great, big *	-kóó	ŋxóó	-kóó
94	laugh	òhèkà	òhéká	òhèkà

No	English	GíRwànà	GìÀhì	ɣínyàMùnyiŋànyì
792	lay over on one side	òránóβàlù ?	òniŋìnììyà	òsásùchà, òkùnyá
1000	lazy	ìRòrò	RòRò	-èènyè
699	leaf, blade of grass	ìhwà/màhwà	ìhwà/màhwà	ìtótò
1025	leaf (tree)	ìRóRò	ìRóRò/màRóRò	ìtótò
911	leak, ooze out	òhólà	òhólyà	òhóórà
96	lean, bend down, slope	ìnàmà	ìnàámà	gìnàmà
536	lean on, rely on	-	-	-
796	lean, become; grow thin	òxòxòà	òxòxòà	kókóà
535	leaning (be)	wéélà	òhàràmìà	òréérà
613	learn	ìfùùnzà ?	òjìfùùnzà ?	gìfùùnzà ?
546	leave, permission	mùrèkèà	rùhúsà ?	yàànjìywà
1011	leave over	sáyà	sááyà	sááyà
547	leave, go away	ńkà	fwàáyà, hèèɣà	òhèɣà
544	leave (off)	rèkà	èèxà	òrèkà
975	left over, (be); remain over	sàáɣà	sááɣà	sááɣà
310	leg, foot	mòɣòò	mòɣòò	mòɣóò
774	lend, borrow	òkòfà	ààlúmá	ààrúmà
107	leopard	ŋòòvì	mwí	ŋòòvì
878	lick (vt)	rààmbá	láámbá	òrààmbá
134	lie down	ràá	òláá	ráá
250	lie on one's back	ráá nyéŋgèlélè	láá wàámbà	ráá ná ŋgèèrè
791	lift up, pick up	òmbòà	fùmbóá	hòmbòà
467	light in weight	ìfòfù	-	mpóófù, àáŋgòfyà
304	light, sky	ìlùndè	ìùndè	ìrùùndè
805	lightning	mpéfò ?	òfìRò	òfìRò, òfìRà
657	lime, whitewash	chòkáá	chòkáà ?	kééŋkè
213	line, row	ìfàándà	mòhìlìlì/mìhìlìlì	ɣòòrà ?
659	line, fishing	ìɣòhè	òɣòhè	òɣòòhè

No	English	GíRwànà	GìÀhì	ɣínyàMùnyìŋànyì
103	lion	nìímbà	níímbá	ŋíímbá
198	lip	mwòòmò	mwòòmò	mwòòmò
956	listen	Rààyà	tàràyà	òtèɣééyà
972	listless (be)	mùlèɣèkù (àdj)	-	gìlèɣékà
1024	liver	iRìmà	iRímá	itìmà
429	livestock (keep)	òRùɣà	òRúɣá	òtùɣà
819	lobster	-	-	-
794	locust	ŋkòòmbì	ŋkóómbí	-
155a	long (become)	òlìfà, òlìifyà	òlìfà	òlìɸà
144	long	ndìfù	lìifù, ndiifú	ndifù
131	look after, care for	gìhééŋgà	òlááɣà	òlèà
871	look after grazing cattle, help a sick man on the road	òdìrìmà	òdìrìmà	òdìrìmà
354	look at, examine	ìhééŋgà	òlááɣà	gìhééŋgà
354a	look around	ihééŋgàŋgà, òlááɣà	wìhééŋgà	gìhééŋgà, wìhééŋgà
200	look for, hang around (to get something), pursue	gófèènjà	òlóólà	ìsègéjèrà
973	loose (be); faint, weak	lèɣèkà	òlèɣè	lèɣèkà
181	lost, get	gòɣàɣà	yàɣáá	yàɣàà
1023	louse	ndà	ndá	ndà
769	love, want	òɣàànjà	ɣàànjá	òɣàànjà
934	lung	fófò/màfòófò	ìfófò/màfófò	màɸóɸò
713	magic *	òlòɣì	òlòɣì	òlòɣì
714	maize	mòhííndì ?	ìntáámà/ màntáámà	ihííndì ?
521	make offerings to the dead	òkùmbìkà	òhúmbíkà	ikùmbíkà
226	male	mòɣòósyà	mòɣòósyà	ŋgòósà
10	mamba, green (kind of poisonous snake)	màámbà ?	ndàálò	ŋgòòkìì
793	many	nyìiŋgí	-ìiŋgí	-ìiŋgí

No	English	GíRwànà	GìÀhí	ɣínyàMùnyiŋànyi
1019	many *	nyìiŋgí	-iiŋgí	-iiŋgí
897	marriage	òlòɣwà	iyòòɣóà	gìlòòɣóà, òvìrà
895	marry (of man)	òlòɣwà	gòɣòà	òròɣóà
896	marry (give in marriage-of parents, priests)	òlòɣwéèà	ɣòòá	rògwèèyà
814	master	mòkòò	-	mùtémì
888	match, harmonise (vi)	òníŋànììyà	ògíníŋànà	gìníŋànììrà
935	mature	xòmìè	xàámà	àkòráà
596	meat	nyàmà	nyàámà	nyàámà
259	medicine, remedy	máhóxà	ihóxá/màhóxá	ihókà/màhókà
260	medicine (art of medicine man)	òɣàáŋgà	òɣàáŋgà	òɣàáŋgà
261	medicine-man	mòɣàáŋgà	mòɣàáŋgà	mòɣàáŋgà
90	meet	òhàáŋgà	òhàáŋgà	òhàáŋgà
861	melt	òfèhèrà	òxáRòkà	òháRà
845	midwife	òfàfisyà àxémà	-	-
859	migrate, move away	òhàámà	òhàámà	òhàámà
1030	milk (n)	màáyà, màhòòŋgá	màáyá	màáyà
20	milk (curdled), curds	màáyà	màáyá ní málòlò	gìkàándà
19	milk, (fresh) (n)	màhòòŋgâ	màhóóŋgâ	màhóŋgà
903	millet (bullrush)	òvéé	òvéè	òvèrè/màvéè
290	millipede	hóŋgólwè	ihòŋwéà/màhòŋwéà	hóŋgóórwé
73	mix (ingredients, `season food')	òRèkà nyànyi	òRéxà nyànyi	òòŋgà
72	mix, put together	òxúβììyà	òhàánjà	xòβìyà
363	monkey (small lightish-coloured)	mpòòmà	ntóómbí	ntóómbí
362	monkey (colobus- (with long black silk hair, white on shoulders)	mpòòmà	ntóómbí	-
361	monkey (small, dark-coloured)	mpòòmà	ntóómbí	-

No	English	GíRwànà	GìÀhí	ɣínyàMùnyìŋànyí
716	moon	mwèèlí	mwéélí	mwèèrì
609	moonlight	mwèèlí wéliè	mwèèlí	fààndà mwéérì
59	mosquito	mbó	mbó	mbò
436	mother	ìó	íò	ìyóò
65	mould (pottery)	òòmbá	òómbá	òβòmbá nyòòŋgò
717	mountain	gìɣòòŋgò	gìRààntò	ŋòòŋgò
163	mourning	ŋkùyà	gìlìò	ŋkùyà
1026	mouth	mwòòmò	mwòòmò	mwòòmò
272	movement	-	kìhúkà	mwènèèndò
979	mud, mire	Ròfè/màRófè	ìRòɸè/màRòɸè	ìtòfè
642	mushroom	mpóRà/màmpóRà	ìmpóRà/màmpóRà	mànìnò
152	mutilated (be)	òlèmìè	-	òlèmáà
281	name	lììnà	lìinà	rììnà
539	namely	ìintò	òhányè	ŋgwîí
403	nape (of neck)	nyùmà à ŋkìiŋgò	gìnyàŋxòRì	mòkìɸà
256	navel	nyèkù	ìbúsí	nyèèkù
765	near	fiìfí	fifìì	pììɸì
379	neck	ŋkììŋgò	ŋkìiŋgó	ŋkììŋgò
843	need, request	òsíɣà, òyàànjó, séɣèRà	òsìɣà	sèɣà
962	new	ìfyà	-fyá	mpyà
718	night	òRíxò	òRíkó	òRíkò
755	nine	kèèndà	xèèndá	kèèndà
484	nose	mpòlà	mpòà	mpòòrà
211	number	màβàlyò	-	-
237	oar	ìxwéélò	-	mùRììŋkó
939	obstruct	xíRà	òɣìà	òhíRà, ɣìlyà
48	offspring	mòŋènyà/àŋènyà	mòfààfò	òɸàɸò
66	oil (from plants)	ìkùRà	màxúRá	òkùRà

No	English	GíRwànà	GìÀhì	ɣínyàMùnyiŋànyi
435	oil	màkùRà	màxúRá	màkùtà
818	old times, the past	hèèŋgè	xàìŋgí	kàèŋgè
411	old person	mùnyàmpáà, mùxɪ̀kòò	mùnyàmpáá	mùnyàmpáà
410	old	ìkóò, ìxòòmbí	lɪ̀híílé	àxàèŋgè
214	one-eyed (being)	ŋòòŋgò	ŋóóŋgó	ŋòòŋgò
440	one	ɪ̀mwè	ɪ̀mwè	gámwè
590	open mouth wide	gàmáhà	wààsámà	gàmáhà
984	open	lòɣùà	òrùɣòà	rùɣùà
829	open (set ajar) a door	lòɣùà	òrùɣòà mwáì	òsókɪà
876	order, direct	làɣɪà	àɣìà	òràgɪ̀ɪà
961	ostrich	-	mbúúnì ?	nyòŋgò
640	our(s) pl. 1st person)	ìRò	ìRò	ììtô
506	out (go), go away	òfùmà	òfúmà	òdòà
324	outside	gònjì	ònjí	gòònjɪ̀
217	overcome; win, vanquish	òdàhà	òsíndá ?	òhùmà
995	owed by, be	òdáìwà	òdáíwà ?	òdáìwà
835	oyster	-	-	-
207	pack (luggage)	òRùŋgà	òRúŋgá	òtùŋgɪ̀ŋkànìà
208	pack, press together	òRùŋgà	òfááŋgá, òhúúŋgà	òlòndɪ̀ìlà
456	pack, flock, group	-	ìdáé/màdáé	ìdè
457	pack, bale, bundle (n)	mùlìɣò	-	-
236	paddle (n)	-	kááfì ?	kɪ̀Rɪŋkó
342	palate	-	ìyàxáxà	lyàkáákà
9	palm (date)	mòtééndè ?	mòRéndè ?	-
719	palm-wine	ntòì	-	-
257	palm (of hand)	ìɣànjà	ŋxóóndè	ìɣàànjà
6	palm (raphia)	-	-	-
7	palm (borassus)	mùfàmà	-	mùɸààmà

No	English	GíRwànà	GìÀhí	ɣínyàMúnyiŋànyi
8	palm (oil)	mùchikíchì ?	-	-
459	palpitate, flutter, tremble	xàxàRà	ùxàxàrà	xàxàRà, gìinà
47	parent, s/he who begets	mùfàfi	mùfàfí	mùɸàɸi
720	parrot	sìliíŋgwà	mùnyàsùswí	-
232	pass, surpass	ùkĭlà	ùxĭà	ùkĭrà
325	path	njià	njià	njià
159	pay	ùlĭfà	ùlĭfà	ùlĭɸà
600	pay attention, take care	gìhééŋgà	láávà	gìhééŋgà
820	peel, shell	ùbàdùà	ùbàdùà	ùbàdùà, ùsùùβyà
12	peg	màxòmbó	màhòmbù	-
11	pegs (tent)	ŋkĭĭŋgĭ	ùxĭĭŋgĭ/ŋkĭĭŋgĭ	màámbò
494	penetrate	hèfèrà	èfèèyà	ùhèɸèèrà
721	penis	mbólò	ùɣóósyà ?, mùkĭà ?	irùɣà, ijùùŋgà
884	penknife, lancet	gàkòjò	-	gàkùòjò
558	person	mùùntù	mùùntù	mùùntù
638	pestle	mùxòŋkò	mùxóóŋxó	mùxòòŋxò
312	pig	ŋgómà	ŋgùlúwè ?	ŋgùúmà
414	pigeon, kind of	ŋkùónda	ŋkúúndè	ŋkùúndà
579	pile up, pile loads on head	gìRĭíkà	ùgìRwíkà	gùRííkà
479	pinch, make narrow	hìnà	ùhíná	ùhìnà
357	pipe (tobacco)	ìfùúndè	ìfúúndè	ìfùùndè
552	pit, hole	ìxòòmbò	ìhòòmbù	ìkòòmbò
974	place, put (vt)	ùRèndèà	ùRèndéá	òβíkìà
722	place (n)	ŋìí	fààntù	kóókò
892	place of the dead	ùlùòŋgù	gwààlùòŋgù	gìɣòò
225	plait	ùsùkà, ùhùkà	sùùxá	ùsùkà ?
932	plant, sow	ùfàndìà	gùfàndìà	ùfàndìà
510	platform	gìchánjà	-	-

No	English	GíRwànà	GìÀhì	ɣínyàMùnyiŋànyi
834	please, satisfy (vt)	gìkóRà ?	òyàànjìà	òfòrya
93	pleased (be)	òyàànjwà	òyàànjìwà	òyàànjɪ̀ɪ̀wà
13	plot of ground	gìwánjà ?	mòsáè	ikùjà
647	plunder (a town)	òhòrà, òhèèywà	*òhúmà ?*	-
1014	plunge into, cause to sink	òjòbólìyà	òjògòRyà	òjògòRɪ̀ɪ̀à
114	poke	sòsèèyà	òsòsèèyà	òsòsèèyà
737	pole, thin	òkìRò	òfìRò	òkìtò
111	polish, clean by rubbing	òkwàràŋgà	òfáíhà	òfùtà ?
177	pool, pond	gàràmbò	gàámbò	ràámbò, ixáándì
923	porcupine	núúŋgú	nòòŋgò	nòòŋgò
374	porridge (stiff)	òɣèè	òɣài	òɣèè, ntòòrà
42	pot (metal)	ìkófò/màkófò	ìxófò	ìkóóɸò
41	pot, vessel	ŋìífè	ìbélè/màbélè	gìɪɸè
39	pot, mug	mùkébè	mùkébè	mùkéébè
40	pot, cooking (earthen)	nyòŋgó	chòòŋgó	chʊ́ʊ́ŋgò
749	potato (sweet)	ìdòó/màdòó	ìdóò/màdóò	ìdórò
646	potter's kiln	ìRànúrù ?	-	ìRànóó ?
369	pound (grain in a mortar to get off the husks)	òfórà	gòáŋgà	òpórà ?
441	pour away	hùnùà	gòhùnòà	hùnóà
641	pour	*mìmìnà ?*	*mìmìná ?*	*òhùnóà*
748	pregnancy	ndà	wììRò	ndà
636	pregnant, be	wìnà ndà/wììRò	wɪ̀nà wììRò	òhàŋgà ndà
599	prepare	òRèndà	nìŋànɪ̀ɪ̀yà	ònònèèyà
553	press out (oil seed, sugar cane)	òxàmà	sìíndɪ́xà ?	-
986	produce, put forth, display	òdòònyà	fúnyá	òdòòyà
909	prominent (be); put out	hóòŋgírà	gìréá	òdòɪ́yà,
518	pronounce	òhànyà	hànyà	òhànyà, rìgìtyà
340	protect by charm (medicine)	òRèndyà màhókà	òxómá	gìkàyá nà mpìgì

No	English	GíRwànà	GìÀhì	yínyàMùnyiŋànyi
947	protect by charms (target)	òRèndyà màhókà	òlàímà	gìkàyá nà mpìgì
475	puff-adder	pàfàrá	ìRúRùmbàà	-
244	pull	òRà	òùRà	òrùRà
173	pull up, come to a halt	ìmíkà	ímíká	ìmíkà
172	pull up, root up	kùùrà	òùRà, hómpóá	òkùúRà
833	pull, drag	òrúRà	òùRà	òrùRà
57	pump	ìbóómbà ?	bòòmbà ?	ìbóómbà ?
548	push	sùntììyà	òsùntìyà	òsùntììyà
992	put, place, set	βìíkà	ííxà	òβìíkà
887	put together for comparison	ònìŋànììyà	ògìhwèá	gìxwáánià
969	put a pot on the fire	òRèékà	Rèndéá, nyòòŋgò	òβíkìrà
981	put together, compose	βìíkà ìRàmbì ímwí	òRúŋgá	òhàŋgwììyà
862	python	mwìílò ?	nsàáRò	sàRù
656	quarrel (vi)	ìxóβà	ògìxóá	ìréràà
180	quench, extinguish	limyà	límyá	òrìmyà
485	quiet (be)	kilà	òkìà	òkìrà
76	rain	mbùlà	mbùà	mbúrà
917	rain (vi)	mbùlá nìà	mbúá yàxóá	òxòβá mbùrà
1006	rains, the lesser	ìsìsì	mbúá ŋkǐì	ntàáŋgè
197	rainy season	màfíkà ?	giRíxó	màRìkà
580	rumble	xòmà	-	-
26	rat, kind of	ndèsì	mpóxó	-
488	rat (field)	ŋèèŋgî	mpóxó	mpòkò
24	rat	mpòkò	mpóxó	ŋkòhò
25	rat- (very large, long-tailed)	mpòkò	ŋkóhò	ŋkòhò
883	razor	gìwéémbè	wéémbè	gìwéémbè
949	read	òsòmà	sòòmá	òsòmà
1007	reap, harvest	òxàà	òyònòà, òhìnááŋgà	òRìnáŋgà, òtèmà, òkùà

No	English	GíRwànà	GìÀhí	ɣínyàMùnyiŋànyi
523	receive	órà	ɔ̀fɔ̀kèà	ɔ̀ɸókèà
537	reed	màtètè	-	-
632	refuse, say no	híRà	híírà	ɔ̀hìtà
633	reject, refuse, dislike	híRà	híírà	hìtà
545	remain, stay behind *	sàáɣà	sááɣà	ɔ̀sííɣà
1035	remain, stay	sàáɣà	sááɣà	ɔ̀sííɣà
840	remember	kɔ̀mbɔ̀kwà	ɔ̀kɔ̀mbɔ́kwà	kɔ̀mbɔ̀kā
499	resemble *	gwìxwèRè	ɔ̀giníŋànà nà	gìxwà
879	resemble (very closely)	gwìxwèérè nà ŋgɔ̀	gììxwà	gìxwá gì
1031	resemble *	gwìxwèrè	gìihwà	gìxwà
149	rest heavily on, be burdensome	wíRófèwà	lémèá	ɔ̀Rɔ̀nyèèyɔ̀ ?
964	rest the cheek on the hand (in brooding mood)	kwàRà ìhàyà	ɔ̀sìɪ̀mbá	ɔ̀káRà ìhàyà
957	rest, take a holiday	Rɔ̀ɔ́yâ	Róɔ́yà	ɔ̀tɔ́yà
249	return, go back	sɔ̀kà	sɔ́xà	ɔ̀sɔ̀chà
1004	return	sɔ̀kà	sɔ́xà	sɔ̀kà
500	revive	ɔ̀ɔ̀ɔ́chà	-	ɔ̀sɔ̀chɪ̀ɪ̀yà
318	rhinoceros	mpèmbèè	mpèmbèè	mpèmbèè
988	rib	ɔ̀bàlù	ɔ̀bàlú/mbàlù	úbàrù
473	ripe	ìβɪ̀yè	ìβíyé	ìβɪ̀yɪ̀è
996	ripen (vi) *	àβɪ̀yà	βíyá	ɔ̀βɪ̀ɪ̀yà
472	ripen (vi)	àβɪ̀yà	βíyá	ɔ̀βɪ̀ɪ̀yà
209	river	yɔ̀ɔ̀ŋgɔ̀	mɔ̀ɔ̀ŋgɔ̀	yɔ̀ɔ̀ŋgɔ̀
239	roar, rumble	ɔ̀rʊ̀mà	ɔ̀xɔ̀ɔ̀mà	ɔ̀xɔ̀ɔ̀mà
644	roast	gɔ̀ɔ̀chà	ɔ̀chɔ̀ɔ̀mà ?	ɔ̀yʊ̀mɪ̀kà
350	roast (in/by fire)	gɔ̀ɔ̀chà	ɔ̀chɔ̀ɔ̀mà	gɔ̀ɔ̀chà
806	rock	ŋɔ̀ɔ̀ŋgɔ̀	ìgwè	ŋɔ̀ɔ̀ŋgɔ̀
291	rooster (cock)	njɔ̀lɔ̀lɔ̀	njɔ̀ɔ̀lɔ̀lɔ̀	njɔ̀lɔ̀lɔ̀
169	root	mɔ̀ɔ̀yɪ̀	mwìlì	mɔ̀ɔ̀ryɪ̀

No	English	GíRwànà	GìÀhí	yínyàMùnyiŋànyi
29	rotten	ìɣùìlè	ìiβí	ìyòòlù
1012	round (be)	fìndìlyà	gìfíndìlyà	gifìndìlyà
183	round (go), turn round	fìndìlyà	gìfíndìlyà	òfimìlyà
999	round, become	fìndìlyà	gìfíndìlyà	òfìndìlyà
110	rub	fiiŋgá	ògìhìlyà ?	òhùRà
50a	rubbish, garbage	mpàálà, màántò	mpàálà	mpàárà
321	rubbish heap	ìxòòmbô	ìjàlálà ?	ìxòòmbò
826	run	òmàáŋkà	dòà	òmàáŋkà
522	sacrifice	gìdòòyà	ŋkùúmbì	-
723	salt	mùùnyù	mùùnyù	móónyó
95	sand	màhálò	ìhàáŋgàhàáŋgà	màhàŋgàháŋgà
630	satiated (be); have enough to eat or drink	kikóRà	ìxóRá	kikóRà
788	satisfy	dàhìkyè	-	òdàhà, ìkúrà
251	say to, tell to	hánìà	hánìà	òxánìà
783	scorpion	ŋkòòmì	ŋkóómí	ŋkóómí
453	scrape	òhèyàànjà	dòòŋkà	òɸàárà
855	scrape, grate	òfàrɔ̀à	òxwáárá	òpàrùà
856	scratch, grate *	hòβà	hùná	òkwàárà
668	scythe, sickle	nyèèŋgò	-	njòòlò
84	search for	fèènjà	héénjá	òɸèènjà
85	search diligently	kùrà	òxwàárà	òkùrà
738	seat, stool, chair	ìRùùmbì	ìRúúmbì	gìtùùmbì
770	see	gòònà	òónà	òónà
67	seed	mbèyò	mbééyó	mbèèyò
404	seize	kwáRà	xááRà	òkáRà
611	self	-èèsò	-éésò	njèèsò
302	sell	rìinjà	líinjá	ògòsà
570	send	Ròmà	Rómá	òtòmà

No	English	GíRwànà	GíÀhì	yínyàMùnyiŋànyì
451	separate, set apart	bàɣùà	hàmàRʊ́á, gìréká	ʊ̀pàgàtyà
450	separate, leave each other	gìréká	ʊ̀gìréxà	ʊ̀ràkànʊ̀ká
534	set a trap	Rèèɣà	Rééɣá	ʊ̀Rèègà
868	set (of the sun)	wèèlâ	íílá	ʊ̀ʊ̀chà
971	settled (be); be in good order	nìŋànììyà	xʊ́ʊ́ndá	ʊ̀ɣʊ̀ʊ̀kà
754	seven	mùfúŋgàRì	mùfúŋgàRì	mùfúŋgàtì
1033	sew *	Rùmá	fúúmá	ʊ̀Rùmà
589	sew	Rùmá	fúúmá	ʊ̀Rùmà
135	sexual intercourse with (have)	gìRómbà	ʊ̀gìRómbà	wìtómbìè
691	shadow, shade	mpéfò	mʊ̀mímì, mpèèɸò	mpèɸò
867	shame, disgrace	mìnyàà	mìnyáá	mìnyàà
116	shame	mìnyàà	mìnyáá	mìnyáà
724	shame, modesty	mìnyàà	mìnyáá	mìnyáà
386	sharp (be)	ìɣífà	ìɣífà	ìɣíɸà
920	sharpen	nòà	nòá	ʊ̀nòà
915	shave	chúúyà	mʊ́sʊ́á	ʊ̀jʊ́Rà
603	she, he	mwèèsò	mwésó	mwèèsò
287	sheep	ŋxòò	ŋxòò	ŋkòò
1009	shell, cowrie	-	-	-
822	shell	-	-	-
725	shield	ŋgàà	ŋgʊ́ʊ́á	ŋgʊ̀rà
712	shin (bone)	mʊ̀ʊ̀ndì	mʊ̀ʊ́ndí	mʊ̀ʊ̀ndì
968	shiver, shudder *	ʊ̀xàxàRà	ʊ̀xàxàRà	ʊ̀xàxàRà
528	shiver	ʊ̀xàxàRà	ʊ̀xàxàRà	ʊ̀xàxàRà
434	short	kùfì	kùfí	ŋkùpì
430	shoulder, tip of	sòʊ̀ŋgé	ikùfá lá íyègà	iβèɣà
588	shoulder	iβèɣà/màβèɣà	iyègà/màègà	iβèɣà
839	shout	xʊ̀βá mùkìíndò	hʊ̀Rá mwàànò	kʊ̀ryá mùkìíndò

No	English	GíRwànà	GìÀhí	ɣínyàMùnyiŋànyi
946	shrivelled (be); wrinkled	màkùnyà (n)	-	gìhínà
763	sick	-ilwè	òlwíé	-rwé
870	sift	òkìŋítà	úsèkésyà	òsèɣésà
615	sing	gìɪmbà	ɪímbá	wɪɪmbà
3	singe	òlòŋgwɪɪlyà	òßàðrà	òßàwɪɪíyà
980	sink, be drowned	òlòßà	ðRòRùfà	òxàRìà
170	sink	òjùbùlíà	òɲùmóɣìà	òxàRìà
726	sister (his)/ (her) brother	ilòòmbò	mùnà à gìxímà	mùhàjà
627	sit	ixàà	ìxáá	gìxáà
753	six	mùRándàRò	mùRándàRò	mùRándàRò
785	size, measure	mànìŋànìɪyò	òxóó, òlífù	gìɣàànjò
123	skin (of person)	ndɪɪ	ndíí, ikàándà	màkòònjà
124	skin/rind (of fruit)	màbàdà	ìbàdà/màbàdà	màbàdà
303	sky	ilùùndè	ìùndè	ìrùùndè
865	slander, accuse falsely, often secretly	òsèsèà	òhòŋgèèà	òhòŋgèèrya
470	slap	òxòá ìxóófì	òxòá ìxóófì	xòá màkóófì
970	slash	Rèmà	òRèmà mùRì	òtyà
220	slaughter	chɪɪnjà	hìhíRá	òkìgítà
727	slave, bond servant	mùRòmwà ?	mùRómwà ?	mùfàɣáásì ?
728	slave (female)	mùRùɣwà	mùRómwà	-
729	slave, (male)	mùRùɣwà	mùRómwà	mùfàɣáásì ?
136	sleep (vi)	òráà	ráá Ròó	òráá tòó
731	sleep (n)	òrèè	Ròó	tòó
730	sleeping-place, accommodation	òráò, òróó	gìláò	nyùmbá òráà
967	slip, be slippery	òsèRyà	syèRyâ	òtyigòtyà
1021	small	nyòɣò	nyóì	nyòòyò
332	smallpox	ndùì	ndòì	-
241	smell (sweet) (vi)	ònyùŋkílìjà	ònyùŋkìà	ònyùŋkìà

No	English	GíRwànà	GìÀhì	ɣínyàMùnyiŋànyi
242	smell (bad, of fish) (n)	*ònyùùŋkà*	*mùnyùùŋkú*	*mùnyùùŋkò*
240	smell (bad) (vi)	ònyùùŋkà	ònyùùŋkà	ònyùùŋkà
629	smoke (n)	yʊ̀ʊ̀kì	yʊ̀ʊ̀xì	yʊ̀ʊ̀kì
428	smoke (give out) (vi)	ùdʊ̀yà	ùRùŋkà	ùRùŋkà
387	snail, slug	*mʊ́nyʊ́lwì*	*sʊ̀ʊ̀yʊ̀*	*ŋkʊ̀ʊ̀njè*
837	snail	mʊ́nyʊ́lwì	sʊ̀ʊ̀yʊ̀	-
145	snake, serpent	njʊ̀xà	njʊ̀xá	njʊ̀ʊ̀kà
158	snare, trap (n)	mùRéɣò	mʊ̀Réɣò	mʊ̀Réégò
864	sneeze	gìRyámùà	gʊ̀gìRyámùà	ʊ̀tyáámùà
924	sniff, smell out	ònyùùnchà	nyùchá	ònyùùnchà
296	snore, snort	ùxʊ̀ʊ̀mà	xʊ̀ʊ̀mà	ùxʊ̀ʊ̀mà
69	soil	ùrʊ̀ʊ̀ŋgʊ̀	fààŋì	ùrʊ̀ʊ̀ŋgʊ̀
732	song	lyɪ̀ɪ̀mbʊ̀	wíímbó	wɪ̀ɪ̀mbʊ̀
616	songs *	nyɪ̀ɪ̀mbʊ̀	nyíímbó	nyɪ̀ɪ̀mbʊ̀
36	soot	màkíí	mbíʊ́	mbíínú
195	sorcerer	mùlʊ̀ɣì	mʊ̀lʊ̀ɣì	mʊ̀lʊ̀ɣì
201	sore	gìdóndà	gìdóndà	ŋkʊ̀ʊ̀mè
734	soul, spirit	ŋxóó	ŋxóó, mʊ̀ʊ̀yʊ̀	ŋkóó
331	sound, cry	mwɪ̀ɪ̀lʊ̀	mʊ̀lɪ̀ʊ̀	mwɪ̀ɪ̀rʊ̀
64	space (open)	ʊ̀mùnyàxàrɪ̀	mʊ̀sáè	ìyàànjà
82	spark	nsààsè	nsààsé	sààsè
253	speak	ʊ̀hànyà	hàànyá	ʊ̀hànyà, ʊ̀rigityà
733	spear (n)	mʊ̀kʊ̀hà	mʊ̀kʊ̀hà	mʊ̀kʊ̀hà
137	spend time	ʊ̀hwáràáŋgà	ʊ̀dʊ́ßà	ʊ̀kʊ̀ʊ̀ŋgà ŋgàándʊ̀
1038	sperm, semen	màànyɪ̀ á gígʊ̀ʊ̀syà	máányí á gígʊ̀ʊ̀syà	màànyɪ̀
62	spider	-	ndùywàli	sàyʊ̀ʊ̀ndi
182	spirit (of dead person)	lʊ̀rɪ̀mù	-	mìʊ̀ʊ̀ŋgʊ̀
464	spirit (disembodied)	-	àlʊ̀ʊ̀ŋgʊ̀	mìʊ̀ʊ̀ŋgʊ̀

No	English	GíRwànà	GíÀhí	ɣínyàMùnyiŋànyi
683	spirit (evil)	-	-	-
582	spit	òRyá màRè	òRyá máRé	òtyá màtè
533	spittle	màRè	màRé	màtè
601	split, crack (vt)	òxámòkà	àxánóá	òhákòà
951	spoil, blind (vt)	ɸòxùà	hòxùà, ɸòxùà	òhòkùyà
649	spoil (a child)	gìRéndyà	òhèkèywè	òhèkèyà
998	spoil	òlòβàŋgà	òxòlùàŋgà	òrùàŋgà
813	spoon	gìRèŋxò	gìRéŋxó	gìRìŋkò
5	spot, speckle	màhàdà	ìdònè/màdònè	màdòà
959a	sprain an ankle	òfàmáɣà	Réɣóá	òRùmbòà
141	spread out (be)	gènéyà	niŋànìyà	gìɣéàɣèà
527	spread	ànìkà	Ràndíxà	wàárà
908	spread abroad, be; become generally known	gòmànyìkà	gòmànyíkà	kùmókà
592	spread, smear on	òβilà	giilà	òβirà
591	spread, scatter (vi)	βàɣànìkà	àɣáRà	òfàgàRà
880	spring (of water)	òRòRù	mùlíhí	gìnyèèrè
965	spring, machine	mòtáámbò ?	múRámbò ?	mòtàímbò ?
866	spy out	òfèènjà	-	gòóryàmpáá mpwà
849	squat (on the haunches)	òfùníá ɣìnò	sùsámá	òsùsámà
991	squeeze oneself up against a wall (e.g. to allow another to pass)	gifiàntàámyà	ògìxóRà	igóRà
914	squeeze out	òminyà	miìnyá	òmìnyà
343	squeeze, milk	-xàmà	-xámá	òxàmà
102	squirrel	-	sììndì	lóóŋgì ?
562	stack, pile up	ìjwììyà	òòndá	òlòòndà
1029	stand (vi)	iβìxà	ìmíxá	ìmíkà
735	star	njòRà	njòRà	njòRà

No	English	GíRwànà	GìÀhí	yínyàMùnyiŋànyi
390	stare, glare	òdòyá ìmìhò	òònḍòá	òndòà
202	start off, send away	dòòyà	héèyá	òhèèyà
799	startle, catch unawares	òmàànyà	sàámà	òmùxàáŋgà, òògófyà
830	startle, jerk	òyófyà	sàámà	òxàáŋgà
618	steal	òhfímbà	iìβá	giiβà, òhìimbà
266	steel	ìchòòmà	ìchòòmá	-
554	stem (of maize, millet, etc.)	màbôβà	ibóá	ìbòβá/màbòβá
825	step over	Ràmbòkà	limá	òlìimà, òRàmbókà
315	sterile man (or woman)	mùyòòmbà	ntààhà	ntàáhà
541	stick	mwàáŋgà	mwàáŋgá	mwàáŋgà
74	stir, mix by stirring	xòmbàŋgà	òrùβàáŋgà	xòòmbâ
850	stir	gèèŋgà, òRèèndà	òyáníá	òlùβà
78	stir up	Rwííyà	wàdòà	òxòβíyà, òxòòmyà
61	stone	ìgwè/màgwè	ìgwè	ìgwè/màgwè
228	store up, collect	ùùndà	hàŋgwîìyà	òlòòndà
154	straight (make)	hòòchà	òyòòrà	òyòòrà
268	stranger, guest	mùyènyi	mùyènyi	mùyènyù
661	stream, current	ifàándà	gàmòòŋgò	yòòŋgô
798	strength, power	ŋgùù	ŋgùù	ŋgùù
140	stretch oneself	iyóóchà	ìyóórà	giyóórà
395	strike, knock	òRòáŋgà	òRúà	òtùrà
982	strike with a spear	òhòmà	òhòmà	òhómà
282	string (n)	òyòhè	òyòòhê	òyòhè
487	strip off (e.g. grains of corn)	òfúrà	òfùàrà	òpòòrwà
519	strut proudly	giònà	gihómyà	gijéémbâ
407	stumble	gìkwárà	hàŋgòòxà	òkùmíà
997	stunted (be); be spoilt	dúbì (àdj)	-	-
948	stutter	ògòRòmbòyiìshà	òúŋkàànià	yògòβìyà

No	English	GíRwànà	GìÀhì	ɣínyàMùnyiŋànyì
594	suck (the breast)	gòòŋkà	óóŋká	gòòŋkà
480	suck (vt)	gòòŋkà	fiífá	òɸìɸà
912	suffer, bear patiently	ɣòìmììyà	òɣìmììà, òɣìmììà	ògimììyà
802	sugar cane	mùŋkényè	mùŋkéényì/ miŋkéényì	mùŋkényè
333	sun, light	lyòòßà	yóóßà	lyòòßà
184	surround	wènèndàáŋgà	fiimá	òɸiimà
438	swallow	miilà	àáŋkìà	òmilá
777	swear	giláfià	ààfá	òràɸà
905	sweat	mùRúRù	mùRúRù	mùRùRú
392	sweep up, collect in a heap (rubbish)	èyànjá mpàárà	òhòáŋgìà mpàárà	òjòà mpàárà
943	sweep	fyáɣòà	fáɣòà	òchágòà
517	sweet, pleasant	lòòmbè	lòòmbè	lòòmbè
51	swell	giimbá	iímbá	òßiímbè
608	sword (short)	sìímè	sìímè	sìímè
933	sword	ifááŋgà	òfááŋgà	lòòɸyò
360	tail	ìfúúmbú	òfóómbó	ìɸòòmbò
875	take leave of	òràɣà	wààgà	gòàgà
778	take in (from rain, etc.)	-	òòvá	gòòɣá ?
565	take, carry	òhòòrà	òhóá	òhòòrà
233	take off (clothes), undress	hèyá màsàà	yówà	òyòà màsàà
530	tangle	iRímànyíkìì ?	gìfíndìyò ?	-
898	taste (v)	òsòòyà	òònjá	òɣònjà
985	teach, instruct	òfùùndísyà ?	fùùndísyá ?	ìfùùndísyà ?
621	tears	ndìɣíɣò	mìhóólì	ŋwàì
412	ten	ikòmì	ìxómì	ikòmì
121	termite	mùŋhwà	mùhényì	mòhwà
739	testicle	màRòmbò	màRòmbò	ànányàáŋgà

No	English	GíRwànà	GìÀhí	ɣínyàMúnyiŋànyi
1020	that	iyó	-ló, -yó	ìsî
455	thatched roof	iRèmbè	ìfèmbè	màhàɸà ?
767	there	àfò, ò̀kó	hàhó, ò̀xò	-ɸó, ò̀kò
54	they	-èèsò	βèènsò	βèèhò
444	thick, fat	èɣènìí	ɣínié	àɣènié
86	thicket *	gàRùŋkù	gàhàkà, RóŋkÒ	gàRùŋkù, gàháká
854	thicket	gàRúŋkù	gàhàkà, RóŋkÒ	gàRùŋkù, gàháká
619	thief	mùlàkú	mwììví	mwììvì, mùhìímbi
23	thigh (of human)	gìnàmà	gìnàmà, ìnàmà	gìnàmà
22	thigh (of animal)	gìnàmà	gìnàmà, ìnàmà	gìnàmà
559	thing	ìintù	gìì̀ntò	ìì̀ntò
987	think, imagine	-	ɣèmá	ò̀sèɣà
651	thirst	nywèéRà	nywéRà	nyòóRà
740	thorn	ìɣùúyà	ìgúyà/mà(ì)gúyà	ìgúyà
689	threaten	òɣófyà	òògófyà	ò̀kàáŋgà
532	three	iRàRù	iRàRó	tàátú
115	thrust into	ò̀hòmà	xìì̀nyà, hòòmà	ò̀hòmà
420	tick (cattle or dog)	ŋkò̀fà	ŋxò̀fà	ŋkóɸà
1034	tie (fasten) (vt)	Rùŋgà	gòRúŋgá	ò̀hùkìà
258	tie up	Rùŋgà, ò̀chì̀ìyà	gòRúŋgwà òɣòhè	ò̀tùŋgá
978	tingle with excitement	sìsìmò̀kyà ?	-	-
119	tip, point	sòòŋgè	sòòmé	sòòŋgè
741	tobacco	RùmbàRì	ìRúmbáRó	ìtùmbàtì
146	today	lèéò	lì̀ò	rèó
742	toe	mwàáchà	mwáánchà	chà gò múgùù
445	tomato	nyàányà	nyàányà	nyèényè
105	tomcat (half-wild)	iβúlyàáká	éélè	ntyó
743	tomorrow	fádíó	pàdìò	ɸàdìò

No	English	GíRwànà	GìÀhì	ɣínyàMùnyiŋànyì
166	tongue	òlìmì	òlímí	òrìmì
120	tooth (canine), tooth filed to a point	liìnó	liìnó	rìinò
267	tooth	liìnò	líínó/miìnó	rìinò/miinò
306	top, peak	gòòntó	-	góóntò
293	tortoise	ŋkùù, mbàlìɣòɣò	ŋkúú	ŋkùù
277	town	mújì ?	móójì ?	ibómà ?
378	tramp of feet	òhòríyààŋgà	-	-
270	travel	mùhèènjò	tèèndà mihiìnjô	gòRèndá mùhèènjò
540	tree	mùRì	mòRì	mòòRé
538	tremble, shake (vi)	xàxàárà	xàxáRá	òxàɣàtà
566	trickle away	òhórà, ìgìikà	sèmèémbá	òhòórà
401	trunk (of elephant)	mùxònò wá njóú	mùxònò wá njóú	mòxòòŋgà
604	try	sóóyá	sòòyá	òsòòyà
605	tsetse-fly	-	ndòlóβò	ndòróβò
938	turn upside down, turn over	fìntòà, fìndòà	òɸìnìkà	òɸèntòà
174	turn round	fìntòààŋgà	ògìfíndìiyà	òɸìimìyà
711	tusk, elephant's (middle size) *	-	-	òpèèmbè
452	twin	màfàhà	ìfáhá/màfáhá	màɸàhà
185	twist roll, spin with fingers	sòxóRà	sòxóRá	òsòxóRà
483	twist, esp strands	gòɣóhà	òɣóhá	òɸòRà
752	two	-βíí	ivìlì	iβìì
18	udder	mbéé yà ŋòòmbè	gìnènà	gìnènà
945	uncover, reveal	kùnùkòà	fùnùkòà	òkùnókòà
551	unripe, half grown	ìnyékè, ìtííndì	mpóóndò	iRékè
994	unripe, uncooked	iRóRò	ìwìhì	ibìhì
311	up, above	gòntò	gòntó	gòòntò
614	upright	gwìímà	wìímà	wèémà
446	urinate/defecate	nyà, xòjà	òníà, òxójà	òníà, òkòòjà

No	English	GíRwànà	GìÀhí	ɣínyàMùnyiŋànyi
745	urine	màànyì	máányé	màànyè
569	use	Ròmìà	Ròmíá	òtèndèà
307	utmost, highest point	góntò	-	òdáhà
904	vapour, gas	yòòkì	mòòxìò	mùlùkè
380	vein	mùshipà wà sáɣàmi	mùsífà wá sàɣàmi	mùsípà à sáɣàmi
276	village	kìjíjì ?	kìjíjì ?	gìjíjì ?
692	virgin (bride), girl	mòɔnchá	mùnchà	mòòɔnchà
327	vision	gòóRyà	ndóóRó	ndòòRì
330	voice, (thunder)	mòrìò	mòxííndó/ mixííndó	ròòryè
224	vomit	òròká	róxá	òròkà
524	walk (take a)	gòènèèndà	ènééndá	gòèntèèndà
269a	walk	èèndà	èèndá	èèndà
847	wall	-	nxàándá nyùùmbá	ìɸòɸà
983	want, need, wish	góhèènjà	òsììyà	òɸèènjà
507	war	ìxòβì	fiRà	ɸífíRà
790	wart-hog	ŋgìì	ŋgìì	ŋgìì
860	wash oneself (after evacuating)	òfíáɣòà	ògiffí rí hà, ògixòhìiyà, ògisèéntà, òɣìriìndà	gìcháɣòà, giséŋèèntyà
127	wash (hands)	òòyá	óóyá	gòòyà
128	wash (clothes)	góhòmbóá	hómbóá	òhòmbóà
129	wash, take a bath	gòòɣá	òɣà	gòòɣà
322	water	mààjì	mààjì	mààjì
959	wave, let off a trap, remove a spell	óhèìwà màhókà	ààɣòà	òhèɣèà tìkwé
1017	we	sèèsè	sèèsè	sèèsè
1010	weak	mòlàɣèkò	òhòŋgòwè	nyènyè
881	wean a child, give leave, send away	òfwéésyà	èèchá mwàànà iβéè	òɸwéésyà
234	wear, dress	òlyáà	yàáà ìsàà	-

No	English	GíRwànà	GìÀhí	ɣínyàMùnyiŋànyi
501	weave, knit	òRùmà	òRúmà	òRùmà
1015	weight, rhythm	ùrìRò	wìíRò, òlíRò	òìtò, ŋàànè
210	well	lòòjì	ròòjì	lòòji
56	wet (get)	òRòRùfà	òRòRùfà	òlòßà
919	what?	ntòónì	ntòónì	ntòónì
469	which?	yáɸè	ìɸé	yááɸè
192	whistling	mòòlyì	mòlòlì	mòòryè
175	white man	mùjùúŋgù	mòjúúŋgù	mòjúùŋgù
610	white	-èèlò	-èèló	njèèrú
918	who?	nyàányù	àányù	àányú
28	wicked	mbí	òòßí	mòrèyì ?
339	wife	mòxémà	mòxémà	mòxémà
187	wind up (thread)	kùùnjá	òxúúnjá	òfèndìyà
746	wind	úfèfò	òféfò, kìɸúRìà	mpèèɸó
937	winnow	fèféRà, wèèrà	òwèèrà	òɸènéntà
112	wipe	òfùRà	fùùRá	òhùRà
88	wire (brass)	-	màxómò	-
194	witchcraft	òròyì	òròyì	òròyì
279a	withhold from	gìímá	ìímá	gìímà
279	withhold from, abstain	gínyìímà	ògìnyíímà	gìyìímà
338	woman	mòxémà	mòxémà/àxémà	mòxémà
747	womb	ifàfìò	nyùùmbà/ndà òɸààɸì	-
812	word	ihànyò	ihànyò	ihànyò, ŋkàànì
772	work as a mason	òjèèŋgà	òjèèŋgà	òjèèŋgà
167	work (n)	mùlímò	mwìímò	mwìímò
81	wrap up	kùùnjà	húúnjá	òkòònjà
344	wring (clothes)	xàmà	òmìinyà	òkàáŋgúá, minyòòsà ?
773	yawn	wà màáhà	hwá mwàhú/mìàhú	òlá mìàyò

No	English	GíRwànà	GiÀhi	ɣínyàMùnyiŋànyi
593	year	mwàáxá	mwàáxá	mwàákà
750	yesterday	ìɣòò	ìɣòò	ìɣòò
15	you (sing.)	βèèβé	βééβè	βèèβé
1018	you (pl.)	nyèènyè	nyèènyè	nyènyé
715	young man	mònyágìɣósyà	mòhòòmbà	mòhòòmbà
637	your(s) (pl. 2nd) person)	àànyù	àànyú	àànyù
693	youth	mwìkúúmbò, mùúnchà	mòhòòmbà, mòónchá	mòhòòmbà, mònyìkòòmbò, mòsóóŋgò
292	zebra	ndóó	ndóò	ndóó

Appendix 1. Zone F word-list: F25, F33 and F34

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
133	abdomen, stomach, belly	èndà	ìǐndà	ndà
495	abscess, boil	ípùùmbà	isòòŋgò	sóóŋgó
786a	abundant/abound	àmíŋgì	fwèé	pàrà, nyìiŋgí
786	abundant	àmíŋgì	fwèé	pàrà, nyìiŋgí
571	abuse, insult	kòtòkànà	kòtókìrà	òtókànà
252	abuse, reproach	kòkàlìpílà	kòdàlàryà	òtókànà
809	accustomed (get)	kòzólèlà	kwìjòvìrà	wèíjèvèrà
274	act (vt)	kòlòòŋgà	kùbòyà ?	jìshá
229	add up	kòkòòŋgèjà	kwòòŋgéryà	òsàànjà
927	adjacent (be); border (vi)	-	kòhákànà	òlàànèrèrà
662	adze, carpenter's	ìmbìǐjò	-	mpàáŋgò
254	affair	ijáámbò/àmàámbò	isáárè/màsáárè	mpòòŋgó
1002	afraid (be)	kòkóógòpà	kwòòfà	wòófà
168	agriculture	ìchìlìmò	ìrìmà	rèmà
926	all	yèèsì	òòsì	-óónsè

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
248	alter, change	kòpìlòlà	kòbàdílishà ?	wààlòryà
595	animal	ìnyààmà	nyàmà	máká
617	answer a call	òkwítìkílà	kwíftìkà	wèítèkà
782	answer, reply	kòjíibù ?	-	òtààlòlà
664	ant (reddish-brown biting)	ìsàlàfù	mbòríkàsì	nyèrèrì
122	ant-hill	ìinshwá, òkichógòlò	kyòòlò	chòòlò
663	ant (small)	-	mòjójò	miiré
586	anvil	-	-	-
989	apply by stretching, spread over	-	kòvàámbà	òváámbà
976	appoint, set up	kòkòntèmà	kwìimyá	òfà
55	arm, hand	óŋkònó/ìmíkònó	múkònò	mòxònò
771	armpit	ífíŋgwàpà	kìnyésù	kwàáwà
203	arrange, put in order	kópàáŋgà	kùpàáŋgà	òvéká tèrérè
204	arrange, put right, repair	kòténgànífjà	kùténgènèshà ?	òjìíshà
478	arrive	kòsòkà	kòfikà	òfikà
665	arrow	òndòòndà	mpàándò	mòòyé
666	arrow (head of); spear head	pàlàlà	mwìwì	mpàándò
337	ashes	itwiitwi	ìvù	yúú
199	ask for	kólèèŋgà	kòlóómbà	òlóómbà
89	assemble, collect (vt)	kòsàáŋgà	kòzíiŋgà	òbósà
789	aunt (father's sister)	séénjí	m(ù)dàlà	màáwé
148	avoid, dodge	kòkwèèpà	-	òdérà
688	awe, fear of God	-	-	-
667	axe	ìíndèmò	chàárya	chòómà
364	baboon, ape	ìímbòmá	nchwè	ntúvè
634	back of (at the)	kòònùmà	nyùmà	nyùmà
297	back	mùgòòŋgò	mwòòŋgò	mòòŋxò
297a	backbone	mùgòòŋgò	mwòòŋgò	mùgóórù

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
27	bad	ìwì	yàvéhà	kìví
37	bad (become), rotten (vi)	kòlùwàŋgìkà	kòólà	wùùndà
87	bait	ìchààmbò/ ìvyààmbò	cháàmbò	wèíshà
398	banana (plant)	-	mùgòómbà	mùgòómbă
397	banana (fruit)	ìndìzì	ndìzí	ndìsì
399	banana (for cooking)	-	ndìzì	ndìsì
1005	baobab	òmbòyò	mwìfwì	mwàáùyè
1022	bark (of tree)	ìgàámbà	ìkòkò	jólà
313	barren (of living being)	-	mùùmbà	tàásà
314	barren (of land)	kìsàánà	ìsòkòlà	òkálòkù
376	base of tree-trunk	-	chìnà	ntííndè
650	bask (in the sun), warm oneself	kòkótèlà òndìlò	kwôòtà	wòótà
576	basket of open wicker-work	ìkísàáŋgá	ìhèèŋgèrè	kàkèkápù
577	basket (plaited)	ìchíkápò	kìkáápò	kèkápù
643	bathe	kòchííndà	kòòhà	wòóvà
498	be fitting, behove	kòfwàáyà	yàbóóhà	tèrérè
1	be, become	kòwá	kòvà	òvá
955	beach, coast, shore	kómbwàáni	-	mbàrèmbáé yà làávà
827	bead(s)	ósàlò	kìchìiŋgò, kìsííŋgà	vìsííŋgó, ntótó
416	bean, kind of bean (from *Phaseolus vulgaris*)	ìnjwìwílí	lùkúsà	ŋkòósà
417	bean, small (from bean plant)	màálàgé ?	màhàlàgà	lòòsì
844	bean (runner)	-	lùkúsà	ŋkòósà
1037	bear child	kòlèlà	kòvyáálà	òyáálà
147	beard	ìndèvù	ndèdù	mbùlò
768	beat	kòlàámbà	kòváà	òtúlà, òmùtà
759	beautiful	ìnòònù	bòhà	kèèjá
162	bed	kìtàlà	kìtàándà	órèrè
161	bedstead	-	òrìrì	kòchàánjà, kètáándà

No	English	ìCìWòòŋgò	KiiRángi	KèèMbùwè
653	bee	ìzòchí	njòkí	njókè
775	beer	ìndìì́mbà	ìrùsò	rùsù
497	befit, suit	kònónèèlà	kòbòòhyà	òvèèrèrà
101	below, underneath	pààsí	èsé	nséíséí
186	bend, twist (vi)	kòpìíndà	kòwòdà	òkònà
468	bend (vt)	kòpìíndà, kùgòòndà	-	òfòlòrya
193	bewitch	kòlòwà	kòlòwà	òlòvà
930	bifurcation, cross-roads	pàzìlà pààndà	tùnjèrà jérùmánírà	màbàsú
222	bile	ndòlà	kìsòòŋgò	kèsóóŋgó
262	bind up, splice	kònyèèpà	-	òlàwòlà
658	bird-lime	òólèémbó	ùréémbó	òrèémpò
811	bird	ìnòòni	ndèè	mírè
46	birth (give), to a child	kòlèlà	kòvyàálà	òyàálà
125	bite	kóùmà, kówàwà	kòlùmà	òlómà
221	bitter	kíkàlì	sòòŋgò	òsóóŋgó
223	bladder	-	kìsèlù	kèsúmèèrèrò
482	blind person	òchìpòfù	mùhòkù	mòtifélù
669	blood	òlàándà	sàkàmì	mwàárì
496	blow on, blow up	kòpùtà	kòfwéérà	wèíférà
238	blow bellows	kòpólìíjà	-	-
463	blow away	kòpèpèlòshà ?	kòfwéérèkà	òfàlárya
776	boast, brag, praise oneself	kòkwídàài ?	kwìiyérya	wélúnyà
676	boat	ìŋgàlàwà ?	màshùà ?	mòrìíŋgà, bóti ?
670	body	òòmbìlì/ìmìmbìlì	mùvìrì	móvèrè/mèvèrè
581	boil up	-	kòfòòkérà	òvérà
30	boil (vt)	kòwíflà	kòchèm(ù)shà?, kòtólyà	vèrísha
433	bone	ifùpà/mìfùpà	ikúfà	kúfà
564	bore a hole	kòtówólá	kòtòbòlà	tòòŋgà, òbùtòlà

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
1008	born (be)	kòlèliwà	kòvyáálwà	òyáálwà
910	borrow	kòkwáázímyá	kòkòpà	òkòfà
872	bottle	ìsúpá	chòpá ?	chúpà ?
928	boundary	òlòwìlìmbìlì	mùhàkà	mòlànèrèrò
671	*bow, bending*	òòtà	òtá	òtá
508	bow	òòtà/màòtà	òtà	ótà
953	bowstring	-	*lòdihì*	*lòòwì*
58	brain	òwòòŋgò	βwòòŋgò	wòòŋgò
509	branch	ìsàámbì	ìtàámpì	nsàámà
375	bread	òmùkàátè	mùkàátè ?	mòkátè ?
831	break wind *	kòsùlà	kòféérà	ósùlà
77	break, snap	kòvùnà	kòúná	wùúnà
1036	break wind	kòsùlà, kòkònyà	kòsúlà	òsùlà
17	breast (of a woman)	*màwèèlè*	*màtòòmbò*	*màsìi*
489	breath, breathing	òmfútò, kòfùtà	kèèhò	ŋkòòŋgò
490	breathe, rest	kòfùtà	kòkíhà, kòkèhà	òfwèérèrà
138	bridge	ìdàlàjà ?	dàrájà ?	òlàlò
139	bridge (wooden)	ìdàlàjà ?	-	òlàlò
885	*bring, fetch*	*kólèétà*	kùrètà	rèètà
171	bring to light	kòzòòshà	-	òrérékànyà, òrééryà
882	bring up (a child)	kwààŋgàlìlà	kùrèrà	*òrèrà*
660	brook, stream	chìlìmbànà	mfùlò	mòòŋkànànà
942	broom	ìpyààyà	ìfyààìrò	shéérò
113	broth	òmsòni, mùnsòòni	mùsòòri	mòsòòri
381	brother-in-law, sister-in-law	wàáshè	màáŋgè	màáŋké
341	*brother (older)*	*òŋkádyááné*	ìròòmbò, *kàáká ?*, mwáánítò	wàáfó
673	brother, relative, fellow-tribesman	mwáánító	mùndó	wàmèvérè
874	bruise badly, take the skin off	kòlèmàálà	kòchóbòlà	òmòfòlà

No	English	ìCìWòòŋgò	KìíRàngì	KèèMbùwè
71	buffalo	ìmbògò	mbòò	mbòò, ŋkòlòmà
807	build	kòjèèŋgà	kòjèèŋgà	òjèèŋgà
674	bull	ìlòmé/màlòmé	kàbáàkò	nyàámbà
80	bunch (of hair)	àmànywàálè	-	njéérì párà
890	burden, load	òmùlìgò	mùrùwà	mòrígò
645	burn (vt & vi)	kòkwàkà	kòmórìkà	wàáká
231	burnt (become)	kòkòpyà	kòròòŋgòòrà	òòfyá
179	bury	kòjíkà	kòzìíkà	òvéékà
555	bush	ìpòòli, ónsìtò	isàkà	rúmàò
21	buttermilk	mbòmòòlè	mpòtótò	màsíí àrí ŋkàkàtì
514	buttocks	ìtàkò/àmàtàkò	tàákò	tákò/màtákò
301	buy	kòkálá	kòólà	òòlà
873	calabash	chílàáŋgà/vílàáŋgà	kìsúwà/visúwà	bàáyí/màbàáyí
857	calf of the leg	ímbàámbà	nchàfù	lùsàkù
877	calf	ìndàámà	ndámà	ndámá
31	call	kòkwìtà	kwàánérà	wáámòkà
675	canoe (dug-out)	ìŋgàlàawà	ŋgàlàwà ?	mòríìŋgà
602	canoe	òwàátò	m(ù)túúmbwì ?	mòríìŋgà
993	carry a child on the back (in a blanket)	kòpàápà	kòférèkà	ùúvàlà
567	carry/lift on to head (take up) a heavy load	kòtwìíkà	kwìítííkà	òtèèkà
97	carry astride on the hip	kòpàkàátà	kòkíkà	òkékà
560	carry, take	kòsèèndà	kòsúmòlà	wòócha
578	carry, convey	kòsòómbà	kòtwàálà	òtwáálà
104	cat	ìnyàáú	nyàáù	nyàáú
286	cattle	ìmífùgò ?	ŋòòmbè	vìmákà
486	cease, finish	kòmàlìíjà	kòmàríkìrà	òsírà
526	centipede	táándò	ìŋgìmàgà	ŋgàlórèrì

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
247	change, turn round	kògèlòkà	kwìírórà	òvórèkà
334	charcoal	ikàlá/àmàkàlá	ikàlà/màkàlà	màkàlà
963	charm (esp. to ensure wife's fidelity) (n)	ìnùùmbò	m(ù)tééɣò	mpèèŋgá
32	chase (away)	kòchììmbìíjà	kòríndìrà	òkámàtyà
515	cheek	ìtàámyà	ìsàyà	ŋkàásá
92	cheerful (become)	kòfùlàài ?	kwàànjámùkà	páámpáálà
106	cheetah	-	sòví	nsòvé
585	chest	chìfùà	kìpíímbì	kǐkúvà
672	chest (of animals and birds)	chìfùà	kìdáárì	kǐkúvà
431	chief, headman	mwéénè	mùtémì	mòsúúŋgàátì
431a	chief	mwéénè, mùtèmì	mùtémì	mòsúúŋgàáti
679	child, infant	òmwáánà ndù	m(ù)sííŋgà, mwàánà	mwàánà
597	child, offspring	mwàànà	mwàáná	mwàánà
886	chin	ìchìdèvù	kìdèdù	kǐdèdù
83	choose	kòsàgòlà	kòsáàòlà	òsàòlà
109	civet cat	ìfúúŋgò	nchùùŋgò	chèèfá
255	clan	òlókò	lòkòlò	ndòó
841	climb, ascend	kòtàándà	kwàámbòkà	òkwáávà
550	clod, lump	ilòòŋgò	ìròòŋgó	lóvè
851	close (the eyes, mouth, etc.)	kótìindìlà, kwíínàlà	kòchèénchìǐryà	òtíímbìryà, òvímbà
299	cloth	kìtàámbàlà	kǐtàámbàlà	kìtàmbáà
235	clothe	kòvwìǐshà	kwìvéékèrà	òvékèrà
300	clothes, material	mwèéndà/myèèndà	ìǐŋgò	ŋgò
305	cloud	ikòòmbi, iwìǐŋgò	ìchò	dùùndè/màdùùndè
817	coagulate	kògàándà	kòkwáátànà	òkwàátànà
941	cobra (spitting)	ìhòògò	njóká njìrò	njóká yà kèráátò
906	cohabit	kòkwííŋgìlìlà	kòsàaŋgìrà, kwìilòólà	wìiŋgérèrà
465	cold	ìmbèpó	mpèhò	mpéfò

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
624	come	wíízà	kòójà	òójà
505	come on suddenly, take in the act	kòkùùndèmwìijà	kòshàánírìrà	òkúndírìrà
230	construct, put together	kòtèŋgènèjà ?	kòsààŋgyà	òjìshà
471	cook	kòtèlèèkà	kòrúwà	òtérèkà
557	cook in water or fat	kòtèlèèkà	kòtòòtyà	òtàátyà
43	cooking pan, small	ìnùùŋgò	kikàlàáŋgó	kàlòòmbwá
385	cool (become); get well	kòpòólà	kòhólà	òfólà
265	copper, brass	ìshàábà ?	shàbà	-
283	copy a pattern	kòkwèèndèlèjà	kòtùùbìrìrya	òòkórèrya
894	cork, stopper	ìkɨfúnìkò	mfùníkò ?	kìtìshò
52	corpse, carcass	ivìimbà/màvìimbà	mùvíimbà	mòvíímbà
1001	corpse (human)	àmàiti ?	mùvíimbà	mòvíímbà
383	cough (vi)	kòkóhólà	kòkólòlà	òkólòlà
4	count	kòkwèshàábù ?	kòvàlà	òvàlà
100	country (our)	ìsí yèètù	ìsí yìttò	nsí
14	courtyard	ìsàálà	wàámà	chòówà
852	cover (up)	kòfùnìkɨlà	kòkúnìkìrà	òkúnìkèrà
285	cow	ìŋòòmbè	ŋòòmbè	ŋòòmbè
1003	coward	ùmwòòwá	mwòòwá	mòófà
335	crab	íkàlà/màkàlà	-	ŋkáláárì
520	crawl, creep	kòsèlà	kwàávùlà	wàúlà
612	cricket	ìnyèènzè	nyèènjè	-
153	cripple	ìchílèmà	kigúrù ?	òtàávàlù
803	crocodile	ìndòólò	màámbà	màámbà
319	cross (a river)	kòlàmbòkà	kùrùkà	òtàmbòkà
846	crow (n)	ikòòŋgòólò	ikòóŋgòlò	ŋkóóŋgòlò
308	crown of the head	pàántwè	itóóti	lòòtòòtì
79	crumple	kòkònjákòònjà	kòtfòtáfòtà	òfínáántà

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
370	crush by pounding, pulverize	kòvùnà	kòtwááŋgà	òtúlátùlà
393	crust	àmàkòkó	ùkòkó	lòkóókó
160	cry, wail	kòlìlà	kòrìrà	òrèrà
966	cucumber, small	-	-	tàámbó/màtàámbó
736	cudgel	ikwì	mpòlò	mòtùwámbèryò
165	cultivate	kòlìmà	kòrìmà	òrèrnà
950	cure, cool, heal	kùgàáŋgìlà, kùpùlìjà	kòhòrya	yàándí
355	cut	kùpùtúlà	kòkèrà	òtémà
98	cut, lop	kùpòlòlà	kòkéréèŋgà	òfénjérà
117	cut to shape, sharpen to a point	kùsòòŋgòlà	kòsóóŋgòlà	òfàlà
365	dance (of men, to show courage)	kwiìtùtùmòlà	kòvínà	òlíŋgátèrèryàlíŋgàtèrèryà
53	dance	kùchìnà	kòvínà	òvínà
622	dark, black	nyìlò	njìrò	mwèíràmà
481	darkness	òsikò	kìijà	dùù
824	dawn (vi)	kwàáchà	kwèèrá	kòchééyè
359	dawn, daybreak	mìzáánjà	kwìírìrè	kòtyékánòkà
744	day after tomorrow	isíkwíínjé	lòvírìryà	òkééyé
130	day	lòsíkó	síkù	nsíkò
682	day-time	ònsánà ŋkòlò	mùùsí	mònsékàti
869	day (all)	òmùsànà wéésí	chírìrè	chòòbúchóòbú
751	day before yesterday	isíkwíínjé	érà síkù	èrà nsíkò
423	dead person	òmfwìlè	mùvíímbà	mòvíímbà
424	death	ìchífwò	ŋkùyá	ŋkúyà
931	decorate	kúlèèmbà ?	kòrémbà	òjífèrèryà
446a	defecate	kòkònyà	kònìà	ònìà
631	denial	kòkàánà	síítà	òsíítà
821	deny	kòkàánà	kòsìítà	òsíítà

No	English	ìCìWòòŋgò	KiiRàngì	KèèMbùwè
648	destroy, spoil	kɔ̀lùwààŋgà	kɔ̀sáámbɔ̀là	òsámbɔ̀là
437	dew	òlʊ̀ʊ̀mì	lʊ̀ʊ̀mè	lòmè
219	die (cause to); put to death *	kɔ̀kòmààŋgà	kɔ̀ʊ́làà	òláà
1027	die *	kɔ̀fwà	kɔ̀kúyà	kúyà
425	die	kɔ̀fwà	kɔ̀kúyà	kúyà
504	dig up, dig out	kɔ̀kʊ̀ʊ̀mbà, kɔ̀fùkʊ̀ʊ̀là	kɔ̀fúkʊ̀là	òfókòlà
503	dig	kɔ̀kʊ̀ʊ̀mbà, kɔ̀fùkʊ̀ʊ̀là	kɔ̀sìímbá	òsìímbà
466	diminish, grow less	kɔ̀chèpà	kɔ̀chìinchèrékêrá	òkééfà
635	dip	-	kɔ̀túúgyá	òtákèryà
49	dirt	ʊ̀chááfù ?	kósù	hááli
680	district, province, country	ìsî	ìsî	nsé
245	divide	kɔ̀gàwàànyà	kɔ̀gàvà	òvànìà
512	divorce	kɔ̀lèkà	tàlàkà ?	ìrèkò
367	do, complete, finish	kɔ̀màlìijà	màrìkìryà	màrérà
366	do	kɔ̀lòòŋgà	kɔ̀bòyá	ójishà
60	dog	ìĭmbwà	kɔ̀rí	díyó
292a	donkey	-	ndàkwí	ndáákó
685	door	ʊ̀ndyàáŋgò	múlyàáŋgò	mòrèèŋgò
415	dove (red-eyed)	ìnjìwà ?	njívá	njèvá
188	doze	kɔ̀tìindîlà, kɔ̀sìimîlà	kɔ̀láálà	ònyàáshà
529	draw water (from well)	kɔ̀tèpà màází	kɔ̀táhà màájìi	òtáfà
215	dream (vt, vi)	kɔ̀lɔ̀tà	kɔ̀lóótèrà	ólótèrà
328	dream (n)	ìndɔ̀ɔ̀tɔ̀	ndɔ̀ɔ̀tɔ̀	kèróótò
448	drink	kɔ̀mwèèlà	kùnywà	ɔ̀ɔ̀nyá
196	drizzle	àmànyɔ̀ɔ̀nyɔ̀ ?	-	mónyìinyì
780	drop, throw down	kɔ̀kwìishà	kɔ̀fwéìtà	ótyá
284	drum	èŋóómà	ntááŋgàsà	nééŋgá
598	dry (vt), set out to dry	kɔ̀kwànìkílà	kwàánìkà	wàànékà

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
346	dry	ìŋgàvù	yóómà	òómà
954	dry up, ebb	kwìizòlà	-	òómà, chòómù
345	dry up, become dry	kòkàlà	kòòmà	òòómà
289	duck	ìĭmbàtà	bàátà	kìdàkó/vìdàkó
243	dust, cloud of dust	lòŋgòòndì	ìrùrì	túúmbí
628	dwell	kòkwìikàlà	kwìikàlà	wìikàlà
492	eagerness, zeal	ìyàláákà	mpìĭmà	wàáŋgò
491	eagle, bird of prey	-	ŋkúúmbà	lòòvé
563	ear	ìkóótwì (of animals), isikílò (of humans)	kòtò	kótò
70	earth, land	ìsí	ìsì	nsé
44	earthenware vessel for serving up food	isòòmbò	nyìiŋgò	màgùùntí
156	eat	kòkòdyá	kòryà	rá
900	effort, exertion	ìŋgùvù	-	òtómàmì
273	egg	ìyì/mààyì	ìyì	yàáí/mààyí
443	eight	mùnàánè	ìnáánè	nááná
705a	elbow	-	kìkòkòòlà	kìkókólò
329	elephant	ìnzòvù	njèù	njòù
336	embers	ìkàlà/màkàlà	kìiŋgà	kálà
842	embrace	kòjìwà	kòkwàtírìrà	kùmbátírà
394	end (come to an), cease	kòlèkà	kòrèkà	òsírérà
952	escape, recover	kòpònà	kòhòlà	òfónà
899	examine, measure, test	kòpìimà	kòlàáŋgà, kòyérá	òpíímà
45	excrement, dung	màáví	màávì	màávì, isàká
958	exorcise, drive out a devil	-	-	òsítà
784	explain	kòkwèèlèèjà ?	kòlúsà	òlósékérà
620	eye	lìisò/àmìisò	rìisò	rìisò/màísò
828	eyebrow	ìĭŋgòpè	màrìrìmà	kèrìrìmà

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
838	eyelash	-	-	ŋkóóshò
587	face downwards	kòkwìnààmà	rárà nà ndà	tòyá ndà/nsè
686	face	òwìisò	kíshò	òshó/màshó
940	fade, disappear	kòzìmìlà	kòrèmèrà	òrímérèrà
891	faint, lose consciousness	kòzìlìkà	kòyírèkà	òrímárìmà
298	fall	kòkòwà	kùùyà	òwà
549	fall short	kòpòŋgòkíílwà	kùchèènchèrèkèrà	òtyékírà
462	fan, wave	kòpùlìjà ?	kùfwèèrà	òfálàlàfààlàlà
764	far	kòtàní	kòlí	kòléì
921	fat (be) (of animals)	kònònà	kònènèhà	ònòlà
922	fat (of animals)	ìnòònú	nènèhà	ònòòlá
531a	father	òbáábà, òònsò	táátà	bàábà
382	father-in-law, mother-in-law	kàyèèmbà	mùkwé	mùkwí
531	father (my)	ònsó, òbáábà wàànè	tàátá wìítò	bàábá
687	fear	wòòwá	wòòwà	wòófà
652	feathers, fur	àmàwéyà	bààèrà	mbúúyé
848	fence, enclosure	lòwàyà	wààmà	kútù
858	ferment, turn sour	-	kòsààsà	chùùndú
762	few (a), not much	ìînjè	ndùúdì	vìké
757	fierce, sharp	-kàlì	yàhóómbà	chìítú
421	fig-tree	-	mùtíínì ?	-
422	fig-mulberry tree	-	mùkóyò	mòkóò
216	fight	kòkòdwà	kwíívàhà	wètúlà
804	fill	kwìizòjà	kòzíbà ?	wèèjórya
176	fill a hole, stop up	kòlìímbà	kòmèmyà	òtífà
583	filter, strain	kòmèènyà	kòsòòjà	òchúújà ?
50	filth	òchááfù	kósù	vìsáámbé
516	final, decisive	-	-	kílóókyè

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
760	fine, excellent	-nòònù	yà bòòhà	kèèjá
447	finger	kàànkònò	ìmàámbà	mónwè
323	fingernail	inìĭŋgwà	mpàáhà	lòjálà
474	fire	òndìlò/mìindìlò	mòòtò	mòótò
280	fireplace, hearth, kitchen	ìfiyà, ìjííkò	rìikó	rìíkò
970a	firewood (collect, cut) (vt)	kòsèènyà	kòtémà ŋkwì	òvíríŋgà
413	firewood	ìŋgwí	ŋkwi	ŋkóó
191	fish up, pull out	kwìipòlà	kòtòólà	òlòwòlà
126	fish (old Swahili *nswi*)	ìshwì	sàmááki ?	nsíyé
190	fish (vt), trap fish	kòvùà shwí	kòkwáátà sàmáákì	òtèyà nsìyè
400	fist	ìŋgùmì	ŋgómì	ŋkóóndé
525	five	zìtàánò	ísàánò	sáánò
493	flap wings wildly, flutter	kòpùpòmòká	kòfáláfáántà	òfàlàlà
832	flatulence	kòvimbĭĭlà	kòvóhìrwà	òfùlùmèrèrà
384	flavoured (be properly)	kònògèèlà	-	òkórérà
907	flower	ìùwà/àmàùà ?	ìúwà	òlóríwá
278	fly (house)	ìsàŋgàázì	njòòsì	ŋgíà
1028	fly (vi)	kólòkà	kòhólòkà	òfàlàlà
1032	foam *	ìpòvù (of soap), ìfùùlò (the rest)	ìfúlò	fúlò
502	foam	ìpòvù (of soap), ìfùùlò (the rest)	ìfúlò	fúlò
143	follow (in order)	kòfùátà ?	kòtúbà	nòòŋgò
142	follow	kòfwàátà	kòtúbà	òtúúmbà
823	food supply for a journey	ìnsòòmà	màsóólà	ŋkáándà
556	forest	ònsìtò ?	ìsákà	sàfisàáfi
584	forge	kòlèŋgànìjà	-	òchàánà
889	forget	kòkwííwà	kòrímìĭryà	wèèvà

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
458	fork, bifurcation	ìzɪ̀là pàándà, ìkòòwà (for use in millet), ndèmèèlò (for pot)	tàámbàrɪ̀kò	màbàsí
442	four	zìní	ìné	íínyè
295	frog	òchóólà	ìbùùlà	chòòrá
574	fruit	-	màtúúndà ?	-
349	fry	kòkálàŋgɪ̀ɪ̀jà	kòkálàáŋgà	òkálàáŋgà
936	fully developed, be	kòkwèènjòkà	kòvɪrwà	òkólà
625	full (become)	kwíízòlà	kòmèmà	wèjólà
316	garden	-	kàwùùndà	dàáŋgí
419	gather (flowers, fruit)	kòyàwà	kòtúúndà	òtyá
91	gathered (be), assembled (be)	kòkwíwònà	kwɪ̀ɪ̀jííŋgà	wèvíríŋgà
368	gazelle (Grant's)	-	mbúúmà	mbwàálá
454	gazelle, small (impala)	ìmbàátù	vódò	njèérà
108	genet (kind of speckled civet cat)	òfùùŋgò	nchùùŋgò	chééfá
408	get, obtain	kòpàtà ?	kòpàtà	òtóólà
684	ghost, sudden apparition	òònzùkà/mìzòkà	mùrèmò	mòrímò
568	giraffe	ndwìiyà	ntwɪ̀ɪ̀yà	ntóóyà
246	give away (present)	kòfùnyà, kòkòòmpà	kòhóóŋgírya	ŋkóyì
449	give	kòòmbà	kòtóólà	òfá
916	give light to	kòwàáshà	kòmòrɪ̀kà	òtónjèrà
815	glide, trickle	kòkòòvà	kwɪ̀ɪ̀kà	wèkèrèrà
269	go	kòwàálà	kòdùmà	òfétà
639	go in, come in, enter	kwìiŋgɪ̀là	kwìiŋgírà	òíŋgírà
63	goat	ìmbòzì	mbòrì	mbórì
694	goat, (he-)	jìbèbèélò, chìbèbèélù	ŋgùlàátà	ŋgùlàátà
695	god	òmùlòòŋgò	mùlùùŋgù	mòtálàánjá, jòóvà
758	good	nòònù	yà bòòhà	kèèjá
388	goshawk (East African) (*Astur tachiro*)	-	mwèèvè ?	lòòvé

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
68	grain (of cereal)	-	mpèkè	mpékè
696	grandfather	ìsàkòlò	bààbà	màámé
697	grandmother	nìnàkòlò	màámà	mámá
432	grasp, hold in arm	kòmèènyà	kwàátèrà	kùmbátèrà
698	grass, reeds	isòtè/màsòtè	màsàámbè	sáámbé
406	grate	kòkwàlòjà	kòkwààlà	òŋòólà
409	great, powerful, big	ikòlò	kóóló	kìnénè
164	grief, sorrow	-	màkìvà	òríríkànà kèvé
371	grind (grain with a millstone)	kòshà (by machine), kòjèèmbà	kòsyà	òsyà
372	grind coarsely	kòsìginà	kòférà	òférà
212	groove, furrow	kámfèlèji	mfùlò	-
801	ground, cultivated	chàálò	ìwóóndà	wàálà
405	grow up, get large, become great	kòkólá	kòkólà	òkólà
913	grow (of plants)	kòlèèmbà	kòmèrà	òùkólà
461	grown (be fully)	kòkólá	kòvìrwà	òkólà
373	gruel, light porridge	òŋgòòmbwà	ùùji ?	táánté
358	grunt, grumble	kònòòŋgà	kòkúwà	òsóóchà
205	guide aright	kòkàlìpìlà	kòròŋgòòrà	wáánèchà
351	guinea-fowl	ìŋgàáŋgà	ŋkàáŋgà	ŋkááŋgà
701	gun	ìmòdóósì	bòndúúkì ?	búndòkà ?
702	hair	ìnyèèlè	lòjwíílì	njére
977	hair (long straight- of animals and Europeans)	òsììŋgà	lòjwíílì	nyèènjè
75	hair (white, grey)	ìĭmvwì	ìmbwì	mbìyé
703	hand (flat of)	ikìgàánjà	ikóófi	kóófi
157	hand, right	ònjĭĭlò	kòlòmè	kòlómè
439	hand (left)	òmòòŋgò	kòmòòsò	kòmòònsò
476	handle, haft	òmpìnì	mùhíni	mòfénè

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
779	hang in mid-air	kwíílàámbìílà	-	ònìínèrà
655	hard	ŋkàáŋgò	éfáfà	mpàfú
377	hardship, distress	-	àmàrèmà	òtyéékérà
294	hare	-	chúúŋgùrà ?	chèèmí
781	haste	-	chàáŋgò	chàáŋgòchàáŋgò
795	hate, detest	kòsìílà	kòsòólà	òsóóchà
700	hay	àmàkàvú	màsàámbí	lòkòkó
678	head, chief person	òŋkàáli	m(ù)kòló	mòkóló, mùnénè
356	head	òòntwè	mùtwè	mòtwé
352	head-pad	ìŋgàtà	ŋkàtà	ŋkátà
561	heap	ilòòndò	ìlòòndò	kìpùùmpà
391	heap up, ready/set on fire	kòpèèmbà	kòkóryà mòòtò	òkóryá mòòtò
623	hear	kòkwìínwà	kòtéérà	òtéérà
543	heart	òmòòyò	mòtìmà	ŋkólò
944	hearthstone for putting pots on	ìfiyà/màfiyà	ishá/màfià	fiyà
893	heavy, serious, dull	ìkòpàávù	èrùtàà	ndìtò
705	heel (of foot)	-	kìchínò	ntútúnyá
681	heifer	-	ntìínò	ndàmá èkòméé
418	hem, make a border	kòpìíndà	kòúnànìà	òfótà
690	hen, fowl, chicken	ŋgókó	ŋkókò	ŋkókò
766	here	èpà, kòlà	àhà	áfà, ókò
863	hiccup	ŋkwííŋwì	ŋkwìíŋkwì	chéŋkwééŋkwè
800	hide (vt)	kòpìsà	kòvísà	vísà
38	high, be (of meat)	kòwòlà	kòvúúndà	wòólà
326	highway	ìzìlà	bàlàbàlà	njèrà
309	hill	kìtòòndà	lòòlò	mwìímbí
925	hip	inyòòŋgà	nìrì ?	bòòŋgó
317	hippopotamus	ìvùwò	kìbókò ?	mwìíná ?

No	English	ìCìWòòŋgò	KiiRàngì	KèèMbùwè
396	hit with a hammer	kókòŋgòmèèlà	kòchúlà	òkòmérà
706	hoe	iyèèmbè	ìsèrè	sèrè
990	hold, arrest	kòòndèmà	kòkwàátà	òkwáátà
575	hole, nest	ìlììndì	ìhèèŋgèrè	chùùrú
836	hollow out	kòkùùmbà	kòkòòmbà	òkóómbà
816	home	kòkàáyà	mìítò	kàáyí
654	honey	wòòchì	wòòkì	wòóki
150	honour	kòtògwá	-	-
797	hook (for pulling down branches in plucking fruit)	-	ŋkòòndòsò	gólìdà
189	hook (fish)	ìndòwáánò	ndòánà	ndòánò
707	horn, ivory, tusk	ípèèmbè/ mápèèmbè	mpèèmbè	mpéémbé
288	horse *	-	fàrásì ?	fàràásì ?
708	house	ìnùùmbà	nyùùmbà	nyòòmbá
263	how many?	ziíŋgà	ìŋgàhì	íréŋgà, kàréŋgà
572	hump (of hunchback)	ìmbyòòŋgò	mòòŋgò	lòkókò
573	hump (of cow)	ìnòòndò	mòòŋgò	kúkú
756	hundred	ìmyà ?	mìà ?	mèròòŋgò ètáánò
320	hunger	ìzàlà	njàlà	njàlà
33	hunt	kòvwìímà	kòsákàátà	òlòòmbá
34	hunter (professional)	òmvwìmàáji	mùsákàátì	mòlòòmbá
35	hunting	òòvwìmàáji	kòsákàátà, sàkááti	lóómbà
227	husband	ndòòmé	mùlùmè	mòlómè
808	hut	ìnùùmbá, òòliilà	kìhàándá	chùùlò
709	hyena	òlàáwì/áálàáwì	mpìchí	mpítí
1016	I	nèèné	nèèné	nèénè
1013	idleness, sloth	òkàtàvù	òsòkòlò	òvìrà
901	ill (be); groan	kòwíínà	kòlwáálà	òlwáálà
902	illness, (crippling)	òwìíní	ndwàálà	bùùbà

No	English	ìCìWòòŋgò	KiiRàngí	KèèMbùwè
275	imitate	kòdéndèlèèjà	kòtòòmìlyà	òtúmbérèrà
16	in front of	kòmbèèlè	mbèrè	mbèrè
353	in the middle of	pàkásì	kàtí	kàtí
118	incite	kòsòŋgèlà	kòsòòŋgèryà	òsólòlà
206	increase, make greater	kòòŋgèjà	kwòòŋgèryà	òdùùmà
155	increase	kòòŋgèjékà	kòmémà	òswáánìà
426	inheritance	-	-	òlúwérèrà
542	inside, in	ŋkásì	ìsí, nyùùmbí	nyòòmbì
353a	inside, middle	pàkásì	mà ìsí	kàtíkàtì
132	intestines	òòlà	màtúúmbò	màlà
389	intoxicated (get)	kòkòdwá	kòrévà	òrèèvà
513	iron ore	-	-	húúkúmèèrwà
264	iron	-	chòòmà	chòómà
710	island	ŋgàámbì	-	kètèèŋgènyérì
2	itch	kònyègèlà	kònyéérà	wìì́vávà, ònyèèrà
460	jammed (become)	kòkwàámà	kòkwáámà ?	òfántérà
853	jaw (bone)	ìkùpà/màkùpà	ìsàyà/màsàyà	ŋkàásá
960	jealousy	wíívù	ìyìsì	kìfèèyà, kífèyá
271	journey	ònsáfálá ?	ìwèèndò	ìwèéndò, ìòtáámbò
606	judge (vt)	kòkwámùlìlà	kòtátòlà	wùùkúmèrwà ?
810	jump, leap	kòlòká	kòròkà	òférèrà
477	kidney	-	fííwá	ŋkòsàáŋkòsà
218	kill	kòkómàáŋgà	kòólàà	wòólá
677	king	mwèénè	mùtèmì	mùsúŋgàtì
787	kite	òmwèèwè ?	mwèèvì	mpóóŋgó
347	knead	-	-	òfínántà
348	knee	igóóti/màgóóti ?	ìchóómèrò	kìírù
427	kneel	kòlàámbà	kòchwáámà	wètúwámbèèrya

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
607	knife	chìsù (of women), òmpyàànò (for men)	lìfyò	lòshó
402	knife, thin, curved, broad-bladed	ìsèèŋgò	chààryá ?, lòkókòòyò	lòshò lá fótà
704	knot	ífùùndò	chòòŋgò	fúúndò
626	know	kòmàànà	kòtááŋgà	ómànyà
178	lake	òlòkɔ̀wà	ìrìvà	láávà
151	lame (be)	kòsùŋgàílà	kòchénchèmà	òchéénchémèryà
511	lamp	ìtàálà	kìmúrì	táà
99	land (dry)	ísí ŋgààvù	táánù	nsí kálòkù
761	large, great, big *	ìŋgòlò	kólò	néénĕ
94	laugh	kòsèkà	kòsèkà	òséká
792	lay over on one side	-	kwìsíkìryà	òkúbéká
1000	lazy	-	sòkòòlò	mòvìrà
699	leaf, blade of grass	ìsòòtè/màsòòtè	ìsààmbí	sààmbí
1025	leaf (tree)	màsòòtè	ìsààmbí	sààmbí
911	leak, ooze out	kòkɔ̀ɔvwà	kòtóónyà	òsólòlà
96	lean, bend down, slope	kòkwiìnàmà	kwìnàmà	wènàmà
536	lean on, rely on	kòtègémèlà	kwìllááŋgyà	wìvéréérya
796	lean, become; grow thin	kòtópà	kwòòndâ	wòóndà
535	leaning (be)	kòkwégàmìlà	kwìsíkìĭryà, wìnáántìrà	wìsíkìryà
613	learn	kòkwífùùndiìshà ?	kòtááŋgà	wìmànyìshà
546	leave, permission	òlùhúsà ?	-	òlàánìrwà
1011	leave over	kòshàlìĭjà	kòchíírya	òcháárà
547	leave, go away	kòòkà	kòróká	òférénkà
544	leave (off)	kòlèkà	kòrèkà	òrèkà
975	left over, (be); remain over	kòbàkíĭjà ?	kòchéérya	òcháálà
310	leg, foot	ìchìnámà/ìminámà	kòòlò/màòlò	kòòlò/màòlò
774	lend, borrow	kòkwáázìmyà	kòlóómbà	òtáánchà
107	leopard	ìŋgòòl	nsóvì	sòví

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbúwè
878	lick (vt)	kòmyàándà	kònàámpà	ònáámpà
134	lie down	kòlámbàlálà	kòláálà	òláálà
250	lie on one's back	kòkwánzìkà	kòláálà chá mòòŋgò	òláálá chà móóŋgò
791	lift up, pick up	kòkwìínòlà	kwèénòlà	òréryà
467	light in weight	ìmbòòpù	fèrèkà	fóŋgòfòòŋgò
304	light, sky	ìkòòmbì	kòròmò	yòló
805	lightning	ìchìmólímòlì ?	kìmòrì	òméme ?
657	lime, whitewash	ìsòkàlà	chàkàlà	-
213	line, row	òmùsítàáli ?	mùsìtáári ?	mòxòòmbí
659	line, fishing	ìkòlóólà	-	mùrì
103	lion	ìsàámà	nsìímbà	nsíímbà
198	lip	òndòmò/ímìndòmò	mùlòmò	mólòmò
956	listen	kòkwíívìkìshà	kòtèèrèrà	òtéérérérà
972	listless (be)	kònyóŋònyà	-	ònyóri
1024	liver	ìtímà/màtímà	ìtímàõ	tímà
429	livestock (keep)	kófùà	kòfúgà ?	òríshà
819	lobster	-	-	nsíyè
794	locust	ìnzìlè	ŋkòòmbì	ŋkòòmbí
155a	long (become)	kòtàlìímba	kòlíhà	òlífìrìrà
144	long	ndàànì	ndíhì	ndìì
131	look after, care for	kòlèlà	kòlàáŋgà	òrèrà
871	look after grazing cattle, help a sick man on the road	kòsòòŋgà	kòrííshà	òríshà
354	look at, examine	kòlòlà	kòlàáŋgà	òlàáŋgà
354a	look around	kóvwàámbà	kwìròrà	òlàáŋgà
200	look for, hang around (to get something), pursue	kòdólèèlà	-	òlóómbàlòòmbà
973	loose (be); faint, weak	kòkàtàálà	kòrèrà	ònyàálà
181	lost, get	kózìmìílà	kòrímìrà	òrímèrà

No	English	ìCìWòòŋgò	KìíRàngì	KèèMbùwè
1023	louse	ìsòòmì	nyìíŋgìn̄	mpótì
769	love, want	kòfògwà	kwèèndà	wàánjà, òsààkà
934	lung	ipàpà/àmápààpà	ìhùúhù	màfóófó
713	magic *	òlózi	òsávî	òsávî
714	maize	ìsàkà/àmàsàkà	ŋkòwà	kîlòŋgólòòŋgò
521	make offerings to the dead	-	kòtàámbìkâ	òbúbúsà
226	male	ílùmè	mòlùmè	lómè, nyáámbà
10	mamba, green (kind of poisonous snake)	ihòógò	njóká ?	njóká yà mùyègà
793	many	fníínjì	ìréfú	nyìíŋgí
1019	many *	fníínjì	ìréfó	nyìíŋgí
897	marriage	ílòòlè	ílòòlà	lòòlà
895	marry (of man)	kótòòlá	kòlòòlà	òlòólà
896	marry (give in marriage-of parents, priests)	kòlòwèèjà	kòlòòrya	òlóórya
814	master	màòntéémi	mòòsi	-
888	match, harmonise (vi)	-	kwîfàànà	òlànèrèrà
935	mature	kókòlà	kòkáŋgààlà	òkóríyè
596	meat	ìnyàámà	nyàmà	nyàmà
259	medicine, remedy	ikwî	mòòdà	mòtí
260	medicine (art of medicine man)	ùŋááŋgà	wàáŋgà	mówà ?
261	medicine-man	òŋááŋgà	mwàáŋgà	mwàáŋgà
90	meet	kóónà	kòshàánà	òwîónà
861	melt	kòpèèlà	kòchákálòkà	òtííntíkà
845	midwife	-	-	mówà ?
859	migrate, move away	kòsáámà	kùsàámà	òsàámà
1030	milk (n)	àmáwèélè	màsòòsó	màsìi
20	milk (curdled), curds	àmáwèélè	mpòtòtò	màsìi yà kwáátámíá
19	milk, (fresh) (n)	àmáwèélè	màsòòsó	màsìi

No	English	ɨCìWòòŋgò	KiiRàngi	KèèMbùwè
903	millet (bullrush)	òùwélè	màvérè	màvèré
290	millipede	ìsòóŋgòòlì	ìŋòŋòólò	nyòŋgòlá
73	mix (ingredients, 'season food')	kùsàáŋgàsàáŋgà	kùsàáŋgyà	òdùmèrèrà
72	mix, put together	kùkòlògà ?	kùsàáŋgìrìrya	òsàáŋjàsàáŋjá
363	monkey (small lightish-coloured)	ɨmbwáájì	ntòòmbìrì	ntóómbéré
362	monkey (colobus- (with long black silk hair, white on shoulders)	-	-	nyàú kérèèrà
361	monkey (small, dark-coloured)	ɨmbòòmà	ntòòmbìrì	ntóómbéré
716	moon	òmwéézi	mwèèrì	mwèérì
609	moonlight	wèèlò	mwèèrì	mwèérì
59	mosquito	ɨɨmbò	úmò	mbòó
436	mother	òmààyɨ	ìyò	màáwɨ
65	mould (pottery)	kòmàátà	kòómbà	wòómbà, mòómbi
717	mountain	kɨtòòndà	lòòlò	mwèèmbí
163	mouming	chìlɨɨlò	chɨrɨrò	kèrèrò
1026	mouth	òndòòmò	mùlòmò	mòlòmò
272	movement	òdwèèndò/ myèèndò	lòyèèndò	lwèèndò
979	mud, mire	-	ìtòhè	tófè/màtófè
642	mushroom	òyòlà	ìrìnò	màrinó
152	mutilated (be)	kòlèmàálà	-	òtàávàlà
281	name	ɨɨìnà	ìrìnà	rìɨnà
539	namely	òòlɨ	yàáni ?	hámê
403	nape (of neck)	ìŋgòòŋgò	ùkósì	ntàùtèrò
256	navel	kɨpwàwàámbwè	múkòfò	mònyókù
765	near	pàpìɨpi	hɨɨhì	fàùfè
379	neck	ìsììŋgò	ŋkììŋgò	nchììŋgò
843	need, request	kòlèèŋgà	-	ŋkólò
962	new	ɨɨmbyà	nsyà	kífèfé

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
718	night	òsikò	òchíkó	òtíkù, nòtíkù
755	nine	kééndà	kèèndà	kèèndá
484	nose	ìǐmbòlà	mpùlà	mpòlà
211	number	-	-	mùlòòŋgò
237	oar	ìǐŋgàfi	-	mòtíkó wá mààji
939	obstruct	kʊ̀pɨ̀ŋgá	kʊ̀kípɨ̀rà	òsítà
48	offspring	mwáánà	lʊ̀vyáárò	njáálà, mbyáálà
66	oil (from plants)	màfùùtà	màkùtà	nsákàárè
435	oil	màfùùtà	màkùtà	màkútà
818	old times, the past	ìŋgàálì	kálì	chàkálè
411	old person	òŋkàálì, ìlèmbwèŋkòlò (m)	mwòòsì	mòkòló
410	old	ìkàálì	*hàsàkàálà*	*nswàálá*
214	one-eyed (being)	ìsòòŋgò	kǐfrèkà	chòónyà
440	one	ìǐmwì	ìmódò	mòòntí
590	open mouth wide	kʊ̀kwásàmà	kwàásàmà	òsáámà
984	open	kʊ̀fùùŋgʊ̀là	kʊ̀chfɨ́mbʊ̀là	yòólà
829	open (set ajar) a door	kʊ̀pééŋgà	kʊ̀yʊ́ólà	lùútá
876	order, direct	kʊ̀làgìlìjà	kʊ̀làyɨ́frɨ̀rya	tòmá mòtómì
961	ostrich	ìmbʊ̀ʊ̀nì ?	mbʊ̀ùnì ?	núúŋgù
640	our(s) pl. 1st person)	yìǐtʊ̀	yǐǐswì	wèètó
506	out (go), go away	kʊ̀fùmà	kʊ̀fúmà	òsúmà
324	outside	pàázi	wèèrwí	njí
217	overcome; win, vanquish	kʊ́pʊ̀tà	kʊ̀shééndà ?	shòótyé
995	owed by, be	kʊ̀dáiwà ?	kʊ̀dáiwà ? (nòòŋgwà)	òdài ?
835	*oyster*	-	-	-
207	pack (luggage)	kʊ́nyèèpà	kʊ̀chúŋgànɨshà	tùúŋgà
208	pack, press together	kʊ́siìndìlà	kʊ̀chúŋgànɨshà	ònàntèryà
456	pack, flock, group	màkòòndè	ikùùndì ?	vìtíítí

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
457	pack, bale, bundle (n)	ìfùlùùshì ?	mùtùùmbà ?	vìrùtú
236	paddle (n) *	ìŋgààfi	-	mòtèkóó ó máájì
342	palate	-	ìlàkà	kàlákàlà
9	palm (date)	-	mùtèèndé ?	mòtééndè ?
719	palm-wine	ndìɨmbà	-	òòchúŋkùúnà
257	palm (of hand)	ìkìgàànjà	ihàànjà	yáánjà
6	palm (raphia)	-	-	-
7	palm (borassus)	òŋkòmà	-	-
8	palm (oil)	-	-	-
459	palpitate, flutter, tremble	kòtétèmà	kòtètèmà	òsìŋgìsà
47	parent, s/he who begets	òòndézì	ßáßòsì ?	mòyááyé
720	parrot	kàsùkù ?	-	ŋkólósó
232	pass, surpass	kópìɨtà	kòlóókà	hòlòòkà
325	path	ìzɨlà	njìrà	njèrà
159	pay	kòlɨpà	kòrìhà	òrèfà
600	pay attention, take care	kòlòlà, kòsúúŋgàmɨlà	kòlàáŋgá	òlàáŋgà
820	peel, shell	kòpátòlà	kòtònyòlà	òkònòlà
12	peg	-	-	ìfyàátyò
11	pegs (tent)	lòmàámbò/ ìmàámbò	màámbò	lòmàámbò/màámbò
494	penetrate	kwíínjílà	kòkìryà	téérérékà
721	penis	ìlòwà	mbòlò	kívà
884	penknife, lancet	àkàyèèmbè	-	kàsèré
558	person	òòndò/àwàándò	mòòntò	mòòntó
638	pestle	-	mòòsì	móónsè
312	pig	ìŋgòlòwè	ŋgùrùvè	ŋkáámbá
414	pigeon, kind of	íŋgòóndà	-	kèrùkwá
579	pile up, pile loads on head	kòtwìɨkà	kòtótɨkà	wètéékà
479	pinch, make narrow	kòsìnà	kòkònyà	òdídà

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
357	pipe (tobacco)	òntèèmbà	pùùndè	kèbùùndé
552	pit, hole	ilìindì	ìdùùndù	siìmbò
974	place, put (vt)	kówìikà	kòβííkà	òvékérà
722	place (n)	àpáándò	hàántò	fàántò
892	place of the dead	kwàázìmù	kòrímwí	kòrìmù
225	plait	kòsúwà	kòsùkà	òtínà
932	plant, sow	kòsìmìkà	kòhándà	wàálà
510	platform	pàóólò	kìβàándà	pálà ?
834	please, satisfy (vt)	kònónèèlà	-	mbàvàrèèri
93	pleased (be)	kònònèèzwà	kòbóóhyà	òsìnóóŋkà
13	plot of ground	ìsì	ìdàhò	chóówá
647	plunder (a town)	kòkwàámbìílè	-	òvásòchà mòòyè
1014	plunge into, cause to sink	kòkwìiwìijà	kògòròkìryà	òbùlòkèryà
114	poke	kòsùùŋgànìjà	kòsóóŋkà	sòònséra
737	pole, thin	ìmàámbò	-	yòlú
111	polish, clean by rubbing	kòkúsà	kòhònòlà	òfótólà
177	pool, pond	lókòwà	kàríívà	kitèŋgè nyèri
923	porcupine	ìnùùŋgònùùŋgò	nòòŋgò (cf. kìnyésùkè 'hedgehog')	nòòŋgó
374	porridge (stiff)	òwàálì	wàrì	wàrè
42	pot (metal)	ìkópò/àmàkòòpò	ìkópò	màkópò
41	pot, vessel	ìchìíndò/ìvìíndò	chòòmbò ?, nyìíŋgò	vìyá
39	pot, mug	-	mùkébè	mòkébè
40	pot, cooking (earthen)	ìnùùŋgò	nyìíŋgò	nyòòŋgó
749	potato (sweet)	chìlòòmbò	kìrási	kèrási
646	potter's kiln	-	rìikò	nyòòŋgó
369	pound (grain in a mortar to get off the husks)	kópòólà	kòtwàáŋgà	òtwáá
441	pour away	kòkwíítà	kwìítà	wòìtá

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
641	pour	kòkwíítìjà	kòkòóròrà	òlòòŋgèrèrà
748	pregnancy	ìǐndà	èndà	mòkòvá
636	pregnant, be	kòkówá nìǐ ndà	kòvá nà ndà	òvá nà ndà
599	prepare	kòkwándàlìlà ?	kòtàyárìshà ?	ójìshà
553	press out (oil seed, sugar cane)	kókàmòòlà, kòsílè	-	sìyá yà kámà
986	produce, put forth, display	kófùnyà	kòtòólà	òsúnyà
909	prominent (be); put out	kófùmìǐjà	kòfùmyà	òsúmèrà
518	pronounce	kótèlà	kòlúsà	òlósà
340	protect by charm (medicine)	kótèmà	kòkǐǐŋgà ?	òlàùrìryà
947	protect by charms (target)	kózìlndíkà	kòzìlndìkà ?	òlàùrìryà
475	puff-adder	ífùlù	ìtáfùfù	njòkà yá kèràtù
244	pull	kòkwèèsà	kòrùtà	òlùtà
173	pull up, come to a halt	kwíímílílà	kwǐǐmà	wéémà
172	pull up, root up	kòkòmbòòlà	kòŋòólà	òkóólà
833	pull, drag	kòkwèèsà	kòrùtà	òòkùryà
57	pump	ìbóómbà	ßòòmbà	bóómbà
548	push	kòsúkùmà ?	kòsúkùmà ?	òsííndèkà
992	put, place, set	kówǐǐkà	kòvííkà	véékà
887	put together for comparison	kòlǐŋgànìshà ?	kòfànànìryà	wééryà
969	put a pot on the fire	kòtèèŋgà	kòtérèkà	òsìmèkèrà
981	put together, compose	kótòòŋgà	kòtúúŋgà	òsóóŋgérèryà
862	python	ísàtù	sàátú	nsátò
656	quarrel (vi)	kòkúdwà	kwitóólà	wèrémèrà
180	quench, extinguish	kózìlmyà	kòrìmyà	rímyà
485	quiet (be)	kòkwíínàlà	kòtóólà	tóólà
76	rain	ìvùlà	mbùlà	mbúlà
917	rain (vi)	kótònà ìvùlà	kòvá mbùlà	ònìà mbúlà
1006	rains, the lesser	-	màtóóntì	múlá yà mbèrè

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
197	rainy season	chísìkò	kìchìkò	kètíkò
580	rumble	kólèpòlà	kòdèdérèkà	òtútùmà
26	rat, kind of	sèèzi	-	mbèvà
488	rat (field)	ìbúkù	ìfùdyà	chùùrú
24	rat	-	mpòkò	mbèvà
25	rat- (very large, long-tailed)	sèèzi	nyúúrì	kèmùmúrú
883	razor	òwèèmbè	wèèmbè	wéémbè
949	read	kòsòmà	kòsòmà	òlàáŋgì
1007	reap, harvest	kòyáwà, kòtèmà, kòsòlà	kòchwà	òtyá
523	receive	kòpókèlà	kòhókèrà	ìsòkèrà
537	reed	ìtètè/màtètè	màtètè	kìtèètè/vìtèètè
632	refuse, say no	kòkàánà	kòsìità	òsíítà
633	reject, refuse, dislike	kókàánà	kòsìità	òsìità
545	remain, stay behind *	kòshàálà	kòcháálà	òcháálà
1035	remain, stay	kòshàlìjà	kòcháálà	òcháálà
840	remember	kòkómbòkìlà	kòkùmbókìrà	òkómbókà
499	resemble *	kòkwìífwàànà	kwìfwáánà	nàvyó víívì nàchò
879	resemble (very closely)	kòkwìífwàànà	kwìfáánà	nàvyó víívì
1031	resemble *	kòkwìífwàànà	kwìfáánà	nàvyó víívì
149	rest heavily on, be burdensome	kòkwéélèmèèlwà	kwìlááŋgyà	òrèmèrwà
964	rest the cheek on the hand (in brooding mood)	kòkwìínàmìlà	kwìkwáátà màkìvà	èkwátà ìtòómà/ kèbàvéryé
957	rest, take a holiday	kòsùpà	kòhùmòlòkà	òtàálòkà, ófwéérèrà
249	return, go back	kósòwà	kòfyóókà	òtàálòkà
1004	return	kósòwà	kòfyóókà	òtàálòkà
500	revive	kòfùfùlà	kòfùfùlà	pòòmbóryà
318	rhinoceros	mpèlò	mpèrà	mpérá
988	rib	òlòwáávù/ ìmbáávù	lòbàrù/mbàrù	lòbàlù/mbàlù
473	ripe	ìchìilè (fruit), ípìilè (in cooking)	lìvìrwà	èvèríryé

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
996	ripen (vi) *	kòkwíímbà	kòvírwà	òvéryà
472	ripen (vi)	kòkwíímbà	kòvírwà	òvéryà
209	river	òmbáánà	iβòté	mòfùlò
239	roar, rumble	kòtútùmà	kòrùmà	òrùmà
644	roast	kòbánìkà ?	kòókyà	wòómyà mwòòtwí
350	roast (in/by fire)	kòkóóchà	kòchímìkà	wòòchà
806	rock	ìwè	màwùyè	ìwè
291	rooster (cock)	ìjógóló	ŋkòkòlóómè	nsèsèrò
169	root	ìkwáázò	mùrì	mórì
29	rotten	ìwóvù	mbóóvù	kìsàámbókú, ìùndìè
1012	round (be)	kóvwìlìŋgwà	kòvìrìŋgà	òvírìŋgà
183	round (go), turn round	kòpìlímà	kòríŋgírà	sóóntà
999	round, become	kóvwìlìŋgwà	kòvírìŋgà	òvírìŋgà
110	rub	kòkùùsà	kòsúúntà	sóóntà
50a	rubbish, garbage	ìsákà	kòsù	vìsàámbé
321	rubbish heap	ìlííndì lá sákà	ìdùùndú lá kósù	kìpùùmpú
826	run	kóchìmbìílà	kòtííjà	òféénà
522	sacrifice	ìsàdàákà ?	húryò	bósà
723	salt	òmúúnù	sàáŋgàsà	mòónyò
95	sand	òlòsááŋgà	sálò	mòsàáŋgà
630	satiated (be); have enough to eat or drink	kwííkòtà	kwìíkòtà	òikótà
788	satisfy	kòtògwééjà	-	mòò wáánjà
251	say to, tell to	kówìílà, kópòójà	wíírà	òwéérà
783	scorpion	ìĩŋgònyà	íŋgì	ŋgè
453	scrape	kópàlà	kòkwáálà	òfálálà
855	scrape, grate	kópàlà	kòkwáálà	òkáròryà
856	scratch, grate *	kòsòwà	kòkùnà	òkònà
668	scythe, sickle	ìmóójò	-	mùndù

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
84	search for	kòvwàámbà	kòsàákà, kòsàákɪ̀rà	òsàkèrà
85	search diligently	kòpàálà	kòsòlà	òfùkòrà
738	seat, stool, chair	ìchɪ̀tɪ̀ ?	ìchùùmbɪ̀	túúmbí
770	see	kòlòlà	kwòónâ	wòónà
67	seed	ìmbèyó	mbèèyó	mbéó
404	seize	kòlèmà	kòkwàátà	òkwáátà
611	self	yɪ́ɪ́yòónyè	yènyèèryò	nyééné
302	sell	kòkàjà	kòchólòshà	òtá
570	send	kòtòmà	kòtómà	òtómà
451	separate, set apart	kòsáámbàájà ?	kòvɪ́ɪ́kà kìsìmà	tékánólà
450	separate, leave each other	kwɪ́ɪ́lèkà	kwìɪ́rèkà	wéérékà
534	set a trap	kòtèéyà	kòtéà	òtéyà
868	set (of the sun)	kwɪ́ɪ́là	kwìɪ́rà	òwérà
971	settled (be); be in good order	kònógèlèlà	-	véékà
754	seven	-	mùfúŋgàtɪ̀	mòfúúŋkàátè
1033	sew *	kóshònà	kòchùmà	òtúmà
589	sew	kóshònà	kòchùmà	òtúmà
135	sexual intercourse with (have)	kókòòndà	kwìibòòyà	òwéésóómà
691	shadow, shade	páámpèpò, ìchɪ́ɪ́nzìlâ (human)	kìvúúrì ?, mpèhò	mòfèfó
867	shame, disgrace	yàázì	sònì	nsónì
116	shame	yàázì	sònì	nsónì
724	shame, modesty	yàázì	sònì	nsónì
386	sharp (be)	kúkàlɪ̀pà	kòkòlà	wèèfà
920	sharpen	kúpyàáŋgà	kònóólà	ònòólà
915	shave	kúsèènyà	kòkérà	òkásà
603	she, he	mwèènè	yèèí	wèé
287	sheep	ìndóò	mùùndì	árìsà
1009	shell, cowrie	-	-	ŋkálává

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
822	shell	ìgòòmbè	-	ŋkálává
725	shield	ìŋgàò ?	-	gàámbòdà
712	shin (bone)	ílòòndì/málòòndì	mùlóóndì	mòlóóndé
968	shiver, shudder *	kòtètèmà	kòtètèmà	òsìiŋgìsà
528	shiver	kòtètèmà	kòtètèmà	òsìiŋgìsà
434	short	ínìpì	ŋkúfì	ŋkúfè
430	shoulder, tip of	ŋgònyòŋgónyò	màvèà	màvèè
588	shoulder	iwèà	ivèà/màvèà	vèè/màvèè
839	shout	kòlámbà ìchóóŋgò	kòtólà ìsòsò	òbwààkà
946	shrivelled (be); wrinkled	kòkwíísìinà	kwìikùnyà	-
763	sick	mbìînù	ndwáálà, mùlwíírì	-lwááyé
870	sift	kòyòòŋgà	kòchékèsà	-
615	sing	kwíímbà	kwììmbá	wèémbà
3	singe	kówàwà	kòlùŋgúúrya	òréérya
980	sink, be drowned	kòkólòwà	kòòlóvà	òtòòtà
170	sink	kòdódòmèlà	kòzáámà, kòbòrókìrà ?	rìvèrérà
726	sister (his)/ (her) brother	ìlòòmbò	ìròòmbò	wàálákò
627	sit	kwìikàlà	kwìikàlà	wèikàlà
753	six	-	isásàtò	sàánsátò
785	size, measure	cháási	lijóré ?	kárèŋgà
123	skin (of person)	ìŋgwèèmbè	ndírì	mbèró
124	skin/rind (of fruit)	ìgàándà	màkáámpì	kóókó
303	sky	ìwííŋgò ?	kòrómùkì ?	yòòló
865	slander, accuse falsely, often secretly	kòsóóŋgèèlà	-	ntùùŋgò ?
470	slap	kólàámbà ìkóófì	kòvá màkóófi	tóóvá
970	slash	kópùtùlà	kòtèmà	témà
220	slaughter	kósìinzà ?	kòsíínjà	kèrá
727	slave, bond servant	òntómwà	mùrèrwà	mòsòòmbà

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
728	slave (female)	òntómwà	-	mwàànà mwókà mòsòòmbà
729	slave, (male)	òntómwà	-	mwàànà mólómé mòsòòmbà
136	sleep (vi)	kòkònà òtòlò	kòlàálà tòlò	òlálà tòlò
731	sleep (n)	òtòlò	tòlò	tòló
730	sleeping-place, accommodation	ìchóónò	kìlàálò	órèrè
967	slip, be slippery	kòsélèèmbòòkà	kòtèrírìkyà	òtèrèrèkà
1021	small	ìchì	ndúúdì	kìdídí
332	smallpox	ìndòòbè	ndùví	ndòvé
241	smell (sweet) (vi)	kònúúkìílà	kònyúúkírà	wùúndèrà
242	smell (bad, of fish) (n)	kònùùkà	ònyùùkù	ùùndà siimpàivé
240	smell (bad) (vi)	kònùùŋgà ìviwi	kònyùùkà	wùúndà
629	smoke (n)	ìjóóshì	mòòkyì	mòóki
428	smoke (give out) (vi)	-	kòfúkírà	òkùùsà
387	snail, slug	ìŋgónò	ìŋòŋòólò ?	ŋkálává
837	snail	ìŋgónò	ìtàmbàálà	ŋkálává
145	snake, serpent	ízòòkà	njòkà	njókà
158	snare, trap (n)	óónteèyò, iítègò (humans)	mùtèò	òtèyò
864	sneeze	kófyàátò	kùvá màáshà	òsúnyá màáti
924	sniff, smell out	kònúúshà	kòtáhyà	òndùshà
296	snore, snort	-	kòhònà	mùyònò ?
69	soil	ìlóóŋgò	ìròòŋgò	nsálò
732	song	òlwíímbò	wíímbò	chèémbò
616	songs *	ínìímbò	nyíímbò	vyèémbò
36	soot	àmátwìítwi	mìkìrì	mèkíri
195	sorcerer	òndòòzì	mùsàvè	mòsávé
201	sore	ilòòndà	kìlòòndà	kìlwááyè
734	soul, spirit	òmòòyò ?	mùtìmà	móò
331	sound, cry	òndìlò	mùrìrò	mòrèrò

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
64	space (open)	ìlàmbáázì	lòváá	-
82	spark	ìnsàsì	séésé	nsásèènsásè
253	speak	kùtèlà	kòlúsà	òlòsèkà
733	spear (n)	ònddòòndà	ŋkòòŋgò	tímò
137	spend time	kòsùpà	-	òlòòchà mpèèndè
1038	sperm, semen	ìmbèèyò, ìndólàáŋgò	mànyáárì	màájè, ŋkòòŋgò
62	spider	àmátàándò	mbwì	lòòvé
182	spirit (of dead person)	òmùzìmù	mòrìmù	mòrímò
464	spirit (disembodied)	òndìlìmì	mòrìmù	mòrímò
683	spirit (evil)	ìjínì/màjínì ?	mòrìmù	mòrímò
582	spit	kóshwìílá	kòchwá màtì	òtyá màtá
533	spittle	àmátwì	màtì	màtá
601	split, crack (vt)	kòtèpòlà	kwààtòlà	òfàándàlálà
951	spoil, blind (vt)	kòpòfùshà	kòhúkòryà	tìfáryà
649	spoil (a child)	kòlèmàájà	kwìjúvìryà	òdèènchà
998	spoil	kòlùwàáŋgà	kòsàámbòrà	òsàámbòlà
813	spoon	òntìiŋgò	mùtìkò	mòtííkò
5	spot, speckle	ìwàlà/màwàlà, ìwàwà/màwàwà	-	ìvàlá/màvàlá
959a	sprain an ankle	kòtéŋgòlà	kòlàvà	òtáólà
141	spread out (be)	kósàmbàálà	kwèémèrà	òsámbànikà
527	spread	kòkwàálà	kwèénèrà	wàálà
908	spread abroad, be; become generally known	kòkwénèélà	kòtàáŋgíkánà	òmànyèkà
592	spread, smear on	kópàkà ?	kòháká	òsìisyà
591	spread, scatter (vi)	kòsámbàálà	kwèènèrà	wèèsámbàsàámbà
880	spring (of water)	ínsìimbò	chisóchà ?	nchéémù
965	spring, machine	óntáámbò	mútàmbò ?	mòòwò
866	spy out	kòsìímbà ?	-	òdèèndà

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
849	squat (on the haunches)	kòchóchòmàlà	kòchónchómàlà	chúnchùmàlá
991	squeeze oneself up against a wall (e.g. to allow another to pass)	kòkwíímàànè ?	kwìivisà	òsùùsà
914	squeeze out	kòkámòlà	kòminyà	finàántà
343	squeeze, milk	kòkámòlà	kòkàmá	òkámà
102	squirrel	-	-	-
562	stack, pile up	-	kòziíŋgà	vìrííŋgà
1029	stand (vi)	kwíímìlílà	kwìimà	wèémà
735	star	ífízòtà	nyényèèrì	ŋjòtà
390	stare, glare	kòlólèèjà	kòkódòlà miìsò	kòólà mèèsò
202	start off, send away	kóòóshà	kòsíyá	tàányà, sùùnchà
799	startle, catch unawares	kògòndòlà	kòtááŋgà	wààlàrérú
830	startle, jerk	kòshitòlà ?	kòvúúndòkyà	ríìndòlà
618	steal	kòkwííwà	kwiivà	íívà
266	steel	chòòmà	-	chòòmá kèfáfù
554	stem (of maize, millet, etc.)	mápèlèlè	ìbòvà/màbòvà	bòòvá/màbòòvá
825	step over	kòlámbòkà	kòffírà	òtámbòkà
315	sterile man (or woman)	òmwòòmbà	mòòmbà	mòòmbà
541	stick	sòòmi	ŋkòmè	mòrèsà
74	stir, mix by stirring	kókòlògà ?, kóvùlùgà ?	kòsàáŋgyà	òkólòòŋgà
850	stir	kókòlògà ?	kòkòlòà	kòlòòŋgà
78	stir up	kóvwìímà	-	òríndòlà, òsáŋgèrèryà
61	stone	iwè/màwè	iβùyè	wèè/màwèè
228	store up, collect	kòkúsànyà ?	kòziíŋgà	òviríŋgà
154	straight (make)	kògólòòlà	kònyúlùshà ?	wòòlòlà
268	stranger, guest	òŋjèèni	mùyìnì	mwèènyò
661	stream, current	iléémbò	mbòtè	mòŋkànànò
798	strength, power	ìŋgùvù	ŋgùlù	ŋgùlù

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
140	stretch oneself	kòkwíígòlòòlà	kwiwólòlà	wèólòlà
395	strike, knock	kòláámbà	kòhámìrà	òŋósáŋòsà
982	strike with a spear	kólàsà	kòtúúŋgà	túmà
282	string (n)	òózì	lòpòti	mòrì
487	strip off (e.g. grains of corn)	kòpólòlà	kòfúúŋgà	wòfólòlà
519	strut proudly	kwìtùtùmólà	kwíyèèryà	òjìrìkó
407	stumble	kókùùmbà	kòkúŋgúvàlà	kòkòválà
997	stunted (be); be spoilt	kónyòòŋgèlèlà	kòsáámbòkà	òsìtà òkòlà
948	stutter	kògògòmìlà	kòtántáìkà	ndìrikàni
594	suck (the breast)	kòkóóŋgà	kòóŋkà	óóŋkà
480	suck (vt)	kòfyòòmà	kòòŋká	mìimà
912	suffer, bear patiently	kòvúmìlìà ?	kòhimìrìryà	kálàànsì
802	sugar cane	ìgúwà	mwèèkényé	kèjèfà
333	sun, light	ónzùwà	mwàásò	jòóvà
184	surround	kòpìlìmà	kòríŋgírìrà	lìŋgàtèrèryà
438	swallow	kòmìlà	kòmìryà	ómèrà
777	swear	kòlápìlìjà	kwìlàhà	chádì yà mòtàlánjà, wàápà ?
905	sweat	ìjàáshò ?	ìrùtìrà	bíró
392	sweep up, collect in a heap (rubbish)	kóónzùùlà	kòkúsà kósù	òfyééràfyèérà
943	sweep	kòpyèèlà	kòfyáìrà	òfyèérèryà
517	sweet, pleasant	-nòònù	mwèrèrè	mòréré
51	swell	kóvìlìmbà	kòsúßà	òsùùfá
608	sword (short)	ìjìsù ?	lòfyò	sìímè
933	sword	ìpááŋgà	ìpááŋgá	páŋgà
360	tail	ònchìlà	mùkìrà	mòkérà
875	take leave of	kòlàyà	kwàágà ?	òlàánà
778	take in (from rain, etc.)	-	kòtfjìrà	òtéjèrà
565	take, carry	kòsèèndà	kòtóólà	òtóólà

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
233	take off (clothes), undress	kóvùúlà	kwífúmyà ŋgòò	òsúnyá ŋgòò
530	tangle		kwìtárìŋgírìrya	òsànjàsàànjà
898	taste (v)	kòmyàándà	kòsáèrà	òsèérà
985	teach, instruct	kòlííŋgà	kòfúndìshà ?	òmànyìshà
621	tears	màsòózi	mìísòòrì	mèèsórì
412	ten	íkòmì	ìkòmì	kómì
121	termite	ìshwâ	môswà	mèkèsè
739	testicle	àmàβòlò	ndòlò	mbyà
1020	that	yílà	(kì)-là	kérá
455	thatched roof	ìvìlmbò	màkìnù	njàlò
767	there	kòlà	kòrà	fárá
54	they	àwèènê	vòòvò	vòó
444	thick, fat	ínénù	nènèhà	nénè
86	thicket *	ìsákà, ìpòòlù	ìsàkà	tòòndò/màtòòndò
854	thicket	ìsákà, ìpòòlù	ìsàkà	kàtòòndò/màtòòndò
619	thief	òmwììví	mwìívì	mwèívi
23	thigh (of human)	lópàámbà/ ìmbáámbà	ràáwà/màáwà	kìvèrò/vìvèrò
22	thigh (of animal)	lópàámbà/ ímbàámbà	kìjòmbòlò	kivèrò/vìvèrò
559	thing	chííndò	kììntò	kímàkà
987	think, imagine	kòwáájà ?	kwìrìrìkànà	òrírìkànà
651	thirst	ìnyòòtà	nyòótà	nyòòtà
740	thorn	ilíívwà/àmìívwà	mwìíwá	mwìíwà/mìíwà
689	threaten	kòkwóówòkà	kòòfyà	wùùmbà
532	three	zìtàtò	ítàtò	sàátó
115	thrust into	kótùùlà	kòtúúŋgà	òfíshà
420	tick (cattle or dog)	ìŋgòpè ?	ŋkúfà	ŋkóófà
1034	tie (fasten) (vt)	kònyèpà	kòchúúŋgà	òtúŋgà
258	tie up	kònyèpà	kòchúúŋgà nà lòdì	òtúŋgánà mòri

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
978	tingle with excitement	kòjílìmùkà	kwitɪ́fígà màyèrèrà	òsìsímòkà ?
119	tip, point	sóóŋgòfù	-	nsólò
741	tobacco	ítùùmbà	-	tùbátí
146	today	ìléélò	ísikò	ènsíkò
742	toe	-	ìnààmbà	nòò
445	tomato	ìnyáányà	nyáànyà ?	nyáànyà
105	tomcat (half-wild)	íwákà	ìhùlùmì	ndùŋgárì
743	tomorrow	ìyòlò	là mùtóóndò	lòòvì
166	tongue	òólìmì/ìndìmì	lòrìmì	lòrémè/ndémì
120	tooth (canine), tooth filed to a point	-	-	yèèó rá mbàrèmbárè
267	tooth	ìlìinò/àmìinò	ìyòò	yéò/máò
306	top, peak	pàlóólò	chòlwí	júúlù
293	tortoise	ìŋgòòbè ?	kìsàmàntòhè	ŋkúlù
277	town	ìsì	ìsì	mùjì ?
378	tramp of feet	òlwééndòòlè	kìikìi	mikíndò
270	travel	kòwòòkâ	kòkírà njìrà	òtáámbà lòtáámbò
540	tree	íkwì	mùtì	mòté
538	tremble, shake (vi)	kòtétèmà	kòtétèmà	òsìiŋgìsà
566	trickle away	kòkwíítìkà	kwiíkà	òsólórà
401	trunk (of elephant)	-	mùlòmò ?	ŋkónó
604	try	kòpàájà	kòyévá	wèséérérya
605	tsetse-fly	ìndòlòbò ?	ndòróóbò ?	ŋgìyà yà ŋòòmbè
938	turn upside down, turn over	kòpììndòlà	kòpíndùlà	òwòlà
174	turn round	kòpílìmyà	kòrííŋgírìà	òlíŋgátèrèrya
711	tusk, elephant's (middle size) *	ípèèmbè	èndò ?	chííkà
452	twin	ímbàsà/ámbàsà	màásà	básà/màbásà
185	twist roll, spin with fingers	kósòkòtà ?	kòfótà	òfótérèrà
483	twist, esp strands	kósòkòtà ?	kòfótà	fótà

No	English	ìCìWòòŋgò	KiiRàngì	KèèMbùwè
752	two	ùwílì	ivìrì	ívèrè
18	udder	kìwèlè	kìmfírà	kìmírè
945	uncover, reveal	kófùnòlà	kòfúnòlà	òkùnòlà
551	unripe, half grown	máwìsì	itìindì	ntòkòòló
994	unripe, uncooked	máwìsì	mbìsì	mbísè
311	up, above	pàlóòlò	mwìirì	yòòlí
614	upright	kwiímìlílà	wìimà	wèèmà
446	urinate/defecate	kòtóóndà, kòkónyà	kònìà, kòkòòjà	ònìà, òsùmàà
745	urine	màtóózì	mùkóójó ?	màsúmà
569	use	kótòmìlà	kòtúmìà ?	òrá ndìhè
307	utmost, highest point	pàlòólò, ìchìléélè ?	chòlò	lòkúlù
904	vapour, gas	òmvùùkè ?	-	mòòkì
380	vein	mùshíípà ?	lòbààsì	mòòkíífà
276	village	íhàlà	kìjííjì ?	kèjíjì ?
692	virgin (bride), girl	mwáánòkè	mwàárì	mwàáré
327	vision	índòòtò	ndòòtò	vìróótò
330	voice, (thunder)	òlòlìiŋgò	sàútì ?	rìyó
224	vomit	kólòóká	kòtàhìkà ?	òlóká
524	walk (take a)	kòkwééndà	kòyééndà	òtíŋgòká
269a	walk	kòwàlà	kòdòmà, kòyèèndà	fètà
847	wall	òlówòòmbà	lòkàándè	ŋkàándà
983	want, need, wish	kòvàámbà	kòsàákà	òsàáká
507	war	ìvíítà ?	ŋkòòndò	róórì
790	wart-hog	ìnjìlì	ŋgìrì	ŋgìrì
860	wash oneself (after evacuating)	kòkwìipyèèlà	kòswéswèètà	wèèsóólà
127	wash (hands)	kòkúúsà	kòòyá	wòóyà
128	wash (clothes)	kòkáándà	kòfúlà ŋgòò	wàínà ŋgòò
129	wash, take a bath	kòchííndà	kòòhá	wòóvá

No	English	ìCìWòòŋgò	KiiRàngì	KèèMbùwè
322	water	*máázì*	*màájì*	*màájì*
959	wave, let off a trap, remove a spell	kòlágòlà	kòsíyà mùtèhó	tàólà
1017	we	shwééshwè	sòòsó	síyè
1010	weak	ŋgàtàvù	ŋkókòólò	*mònúdúvéŋ*
881	wean a child, give leave, send away	kòlèshà	kòdáánià	òrèchà
234	wear, dress	kóvwààlà	kòìvíkìrà	òvékèrà
501	weave, knit	kóshònà	kòchúmà	òtúmà
1015	weight, rhythm	ichílò ?	òrùtò	òrìtò
210	well	ìchísìmà	idúúndù	sòólá
56	wet (get)	kòkólówà	kòólòvà	òólóvà
919	what?	chìndó chì	ché	kíkí
469	which?	chíchì	èrékwè	kìróórè
192	whistling	òlólòòzî	mòróri	mòróri
175	white man	òŋwéélò	mùjóóŋgò	mòsóóŋgò
610	white	ìnéélò	njèrù	njéró
916	who?	ó náánú	áníé	ányú
28	wicked	íwì	èvèhà ?	mòvé
339	wife	ónchìmà	móókyé ?	mòká
187	wind up (thread)	kògóóndà	kòßùnànìà	fótà
746	*wind*	òmwéyà	mpéhó	mpéfò
937	winnow	kópèétà	kwèèrà	fàràryá
112	wipe	kópyèèlà	kòfùtà	sòólá
88	wire (brass)	ìbàáŋgìlì ?	-	kìnyààló
194	*witchcraft*	*òlòzì*	òsàvè	ólóvá, ósávé
279a	withhold from	kòkwiímà	kwìimà	òtimà
279	withhold from, abstain	kòkwiínyimà	kwiimà	wèétímà
338	woman	wàchíchìmà	mwàànà/mòòntò mòòkyé	mòòntò mòká

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
747	womb	ìĭndá yà (òzáázi)?	ìndà	ndà
812	word	ijáámbò/ màjáámbò	ìsáárè	ntóóŋgó
772	work as a mason	kòjèèŋgà	kòjèèŋgà	ójìshà, òjèèŋgà
167	work (n)	ìmìlímò	mòrìmò	mòrèmò
81	wrap up	kògòòndà	kòúnànìà	òfótà
344	wring (clothes)	kòkámòólà	kòfúúnchà	òòkámà
773	yawn	kòwáyòólà	kwàásàmà	òrá myàáò
593	year	òmwáákà	ŋàáká	mwàáká
750	yesterday	iyòlò	nìíjò	mèèjó
15	you (sing.)	òwééwè	wèèwé	wèéwè
1018	you (pl.)	mwéémwè	nyùúnyù	nyè
715	young man	wàchílùmè	m(ù)tàvànà	mwàànáá/mòòntò mòlómè
637	your(s) (pl. 2nd) person)	yá mwèèmwê	yàànyù	yàányú
693	youth	òchìjáánà ?	mùtàvànà (m), mùhìinjà (f)	mòtàvànà (m), mwàànà móká (f)
292	zebra	-	njàè	ndàkò yá ìsàkè (donkey of the forest)

Appendix 1. Zone F word-list: F24 and Proto Bantu

No	English	KìKfímbò-N	KìKfímbò-S	Proto-Bantu (Guthrie)
133	abdomen, stomach, belly	ndà	ndà	443 -dà
495	abscess, boil	ípùtè	ípùtè	1609 -pótè
786a	abundant/abound	kwííjólà	kwííjólà	-
786	abundant	kwííjólà	kwííjólà	2082 -yíŋgì 1296 -mém-
571	abuse, insult	kótòxánà	kótòxánà	1827 -tók-
252	abuse, reproach	kòtàkílà	kòtàkílà	1827 -tók-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
809	accustomed (get)	kɔ̀mànyíílà	kɔ̀mànyílà	1284 -màn(i)-, 968 -júb- ?
274	act (vt)	kɔ́nɔ̀jà	kɔ́nɔ̀jà	1071 -kít- 1710 -tènd-
229	add up	kòɔ̀ŋgèèlyà	kòɔ̀ŋgèlyâ	285 -càŋg(àn)- 2129 -yòŋg-
927	adjacent (be); border (vi)	kɔ̀ßíímbíŋxánà	kɔ̀ßɪ̀ɪ̀mbɪ̀ŋxànìà	1419 -pàká ?
662	adze, carpenter's	mbìijò	mbìijò	87 -b è(è)jò
254	affair	mpòlà	mpòlà	771 -gàmbò
1002	afraid (be)	kóógópà	kóógópà	2110 -yògùp-
168	agriculture	kòlímà	kòlímà	574 -dìmò
926	all	-ôósè	wòósè	302 -(n)cè 2120 -yónà
248	alter, change	kɔ̀gàlɔ̀là	kɔ̀gàlɔ̀là	760a -gàdɔ̀d- 1515 -pìdɔ̀k- 1528 -pìndɔ̀d- 1529b -pìndɔ̀k
595	animal	ndìmwàànà	ndìmù	1909 -(n)yàmà ?
617	answer a call	kwìitíxà	kwíítíxà	2018b -yítìk-
782	answer, reply	kɔ̀tàáŋgólà	-	-
664	ant (reddish-brown biting)	sílàámbà	nsílàámbà	*ps* 106 -cídàkù
122	ant-hill	kíswà	kíswà	882 -gɔ̀dɔ̀
663	ant (small)	nsìɪnsî	màŋyànsàálè	422/3 -cóŋgò
586	anvil	-	-	965½ -jɔ̀ndɔ̀/jɔ̀ndɔ̀ 403 -cób-
989	apply by stretching, spread over	kɔ̀ßàámbà	xóßàámbà	39 -bà(à)mb- 58 -bàŋg-
976	appoint, set up	kòlàáŋgà	-	2059 -yím(ìd)-
55	arm, hand	múxɔ̀nɔ̀/míxɔ̀nɔ̀	mùxónò	158 -bòkò 1142 -kónò
771	armpit	ŋkwáápà	ŋkwáápà	1171 -kʊ́ápà

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
203	arrange, put in order	kòpàáŋgà	xópàáŋgà	1440 -pá(á)ŋg- 1459 -péd- ?
204	arrange, put right, repair	kónògèlèlyâ	kònògèlèlyâ	-
478	arrive	kòpíxà	kòpíxà	1550 -pìk-
665	arrow	ìsòòŋgà	ìsòòŋgà	386 -còŋgà
666	arrow (head of); spear head	kíntòòló	kíntóólò	-
337	ashes	máù	máù	216 -bú
199	ask for	kòlòómbà	kólóómbà	653 -dómb-
89	assemble, collect (vt)	kòsàáŋgílà	kósàáŋgílà	285 -cáŋg- 459 -dáádìk-
789	aunt (father's sister)	sèéŋgì	sèéŋgì	303 -cé + 810 -ŋgí ?
148	avoid, dodge	kòkwèépà	kòkwèépà	521 -dèg- 1986 -yèp-
688	awe, fear of God	-	-	-
667	axe	ntèmò	ntèmò	1408 -pácà 1706 -témò
364	baboon, ape	mpòómà	mpòómà	-
634	back of (at the)	kòònyúmà	xòònyúmà	2182 -(n)yùmá
297	back	mùgòóŋgò	mùgòòŋgò	858 -gòŋgò
297a	backbone	ŋgàlà mùgòòŋgò	ŋgàlà mùgòòŋgò	273 -cánà + 1273 -kúpà + 1731 -tí + 858 -gòŋgò
27	bad	íbì	íbì	97 -bí
37	bad (become), rotten (vi)	kòwòlà	kòwòlà	153 -bòd-
87	bait	-	-	1920 -yàmbò
398	banana (plant)	mùdòòkè	múdòòkè	1779 -tòòkè
397	banana (fruit)	màdòòkè	ìdòòkè	1779 -tòòkè
399	banana (for cooking)	màdòòkè, kìxòlòbói	-	-
1005	baobab	-	-	214 -bòyó

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
1022	bark (of tree)	ìpátà	ìpátà	1095 -kóbà
313	barren (of living being)	mùgòómbà	mùgòòmbà	894 -gòmbà
314	barren (of land)	ŋxàkò	-	-
376	base of tree-trunk	ítìnà	ítìnâ	1756 -tínà
650	bask (in the sun), warm oneself	xóótà	xóótèélà	2136 -yót-
576	basket of open wicker-work	ìsááŋxà	ìsááŋxà	-
577	basket (plaited)	xíkàpù	kíxàpò	-
643	bathe	xóógà	xóógà	2107 -yó(ó)g-
498	be fitting, behove	kòfàáyà ?	-	-
1	be, become	kóβà	kóβà	2 -bá-
955	beach, coast, shore	ŋhwàánì	ŋhwàánì	1900 -yàdò, 1585 -pó-
827	bead(s)	wáámbò	wáámbò	291 -cáŋgá
416	bean, kind of bean (from *Phaseolus vulgaris*)	ŋkòòndè	ŋkòòndè	1222 -kóndè
417	bean, small (from bean plant)	màhàlàgè ?	màhàlàgè ?	-
844	bean (runner)	ŋkòòndè	ŋkòòndè	1222 -kóndè
1037	bear child	kòlélà	kòlélà	136 bíád-, 512 -dèd-
147	beard	ndèzù	ndélù	519 -dèdù
768	beat	kókòβà	xókòβà	1182 -kób-, 1590 -póód- 1820 -tódí, 1861 -túd-
759	beautiful	-sògà	-sògà	2046 -yijá?
162	bed	kìtáándà	kìtáándà	1666 -tándà 1640 -tádà
161	bedstead	ìtàándwà	òlílì	563 -dìdì
653	bee	njòkì	njòkì	2156 -(n)yókì
775	beer	ntílì	ntílì	1901 -yàdóá
497	befit, suit	kónògélà	kònògélà	-
101	below, underneath	hàásì	pàánsì	332 -cí /pà~mò~ɲcí
186	bend, twist (vi)	kwíígòóndà	kwíígòóndyà	-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
468	bend (vt)	kwíígòóndà	kwíígòóndyà	-
193	bewitch	lòlógà	kólòyà	644 -dòg-
930	bifurcation, cross-roads	mááxà	-	940 -jìdà + 1406 -pàc-
222	bile	ndòlílà	ndílò	689 -dódó, *ps* 190 -dòdòè 690 -dódòè
262	bind up, splice	kòtùúŋgà	kótùúŋgà	785 -gàŋg-
658	bird-lime	wiilèémbò	òlèémbò	*ps* 161 -dèmbò 578 -dìmbò
811	bird	nyònyì	nyònyì	2121 -yòní/nyòni, 522 -dègè
46	birth (give), to a child	kòlèlà	kòlélà	136 -bíád-, 208 -bót-512 -dèd-
125	bite	kólùmà	kólùmà	696 -dóm-
221	bitter	-xàlì	-xàlì	688 -dòdò 984 -kádì
223	bladder	itòndízyô	ìkìbófù ?	1839 -tònd-, *ps* 477 -tùùd-
482	blind person	mpófù	mpòfù	1573 -pòkù
669	blood	mùgàzì	cháájì	766 -gádí, 2081 -(n)yíŋgà
496	blow on, blow up	kòpùútà	kòpùútyà	1613 -púd-, 1623 -púúp-
238	blow bellows	kòpùútìlìzyà	kòpùútìlìzyà	737 -dùgàt-, 738 -dùkàt-
463	blow away	kópèpèlòshà ?	kòpépèlóshà	1489 -pèèp-
776	boast, brag, praise oneself	kwìidàái ?	kwíígàámbà ?	
676	boat	-	-	1949 -yátò
670	body	mùßìlì/mißìlì	múßìlì/míßìlì	112 -bìdì
581	boil up	kòsèlóxà	kòsèlóxà, kòfùlílyà	1777 -tòòg-
30	boil (vt)	kósìchà	kòsìchà	
433	bone	íkùpà	ìkúpà	1273 -kúpà
564	bore a hole	kòdòlà	kòdòlà	1817 -tód-
1008	born (be)	kòlèlwà	kòlèlwà	136 -bíád-, 208 -bót-, 512 -dèd-
910	borrow	kòxòpá	kóxòpà	1152 -kóp-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
872	bottle	nsópà	nsópà	425 -cópà
928	boundary	lóβìɪ̀mbì	lóβìɪ̀mbì	1419 -pàká ?
671	bow, bending	βótà	òtâ	1631 -tá
508	bow	βótà	òtâ	1631 -tá
953	bowstring	ŋgòsà	ŋgósà	860 -gòyè ?, 1583 -pót-
58	brain	βóóŋkù	òbòóŋkò	169 -bòŋgó
509	branch	ítààmbì	ítààmbì	1636 -tàbì
375	bread	mùxàátè ?	mùxáátè ?	1017½ -kàátè
831	break wind *	kòfùfùmólà	kòsùlà	431 -cùd-
77	break, snap	kóbwàádà	kólùnà	230 -bún-, 233 -búnj-
1036	break wind	kòsúlà	kósùlà	431 cùd-
17	breast (of a woman)	máβèélè	máβèélè	71 -béédé
489	breath, breathing	lyòòhè	lyòòpè	1468 -pèèm-
490	breathe, rest	kòsúúpà	kósòòpà	1468 -pèèm-
138	bridge	ìdàlájà ?, itííŋxàtìɪ̀ŋxà ?	ìdàlájà ?	460 -dàdò
139	bridge (wooden)	ìdàlájà ?	ìdàlájà ?	460 -dàdò
885	bring, fetch	kólèétà	kòlèétâ	546 -déét-, *ps* 355 -nént- ?
171	bring to light	-	kòpùpílà	-
882	bring up (a child)	kòsòòŋgà	kòlélà	510 -dèd-, 441 -cúŋg-
660	brook, stream	xàmóóŋgò	xámóóŋgò	662 -dóŋgà, 2000 -yíjì 2041 -yígì
942	broom	kítèèyò	kòpótì	1141 -k ó(ó)mbó, 1509 -pfágìd-
113	broth	mùsóli	mùsólì	405 -còdì
381	brother-in-law, sister-in-law	múlàmù	-	479 -dámó
341	brother (older)	mùkòlò	mbùyéè, múkòlò	1198 -kódò
673	brother, relative, fellow tribesman	mùdògò	ìdógò	692 -dògó
874	bruise badly, take the skin off	kòfyòòmpòlà	kòfyòmpòlà	398 -còòb-
71	buffalo	mbògò	mbògò	157 -bògó

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
807	build	kójèèŋgà	kòjèèŋgà	935 -jèŋg-
674	bull	ìyàgàámbà	ìgòòmbè	697 -dómè, *ps.* 193 -dómì
80	bunch (of hair)	ìsááŋxà lyà nyélē	ìsàáŋxà	*ps* 103 -cici
890	burden, load	múligò	múligò	614 -dígò
645	burn (vt & vi)	kóβàxà	kóβàxà, kópèémbà	1902 -yàk- 34 -bàk(i)-
231	burnt (become)	kópyà	kòpyâ	1502 -pí-
179	bury	kòzyìíxà	kòpòsìílyà, kòzyìíkà	615d -díík-
555	bush	ípòólù	ípòólù	260 -cáká
21	buttermilk	mbóβòtò	-	
514	buttocks	ìtàxò/màtàxò	ìtàxò/màtàxò	1650 -tákò
301	buy	kògòlà	kògòlà	876 -gòd-
873	calabash	nsèéŋkè	ìsèéŋxè	426 -cópà 296 -cápò
857	calf of the leg	lòsàlútà	nsàlútà	264 -càkù
877	calf	ndàámà	ìdámà	1922 -yànà
31	call	kwíítánà	kwíítánà	105 -bíd- 2096 -yít-
675	canoe (dug-out)	-	ìgàláwà	1949 -yátò
602	canoe	-	ìgàláwà	1949 -yátò
993	carry a child on the back (in a blanket)	kòpáápà	kòpàápà	1448 -pàáp- *ps* 520 -yíbàd-
567	carry/lift on to head (take up) a heavy load	kwíítwìíxà	kwiitwìíxà	1812 -tóík-
97	carry astride on the hip	kòpágátà	kólèlyà	1448 -pàáp-
560	carry, take	kòsòlà	kòsòlà	197 -bóók-, 365½ -còd-
578	carry, convey	kòsòòmbà	kwínòólyà	1806 -tóád-
104	cat	nyàáù	ìnyàáù	1420 -páká
286	cattle	nsàwò, mìtùyò	ìmifúyò	850 -gòmbè

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
486	cease, finish	kòmàlà	kómàlyà	351 -cíd-, 1281 -màd-
526	centipede	táándù ?	ìtáándò	-
247	change, turn round	kògèlóxà	kòkélyà, kògèlóxà	759b -gàdòk-
334	charcoal	íxàlà/máxàlà	ìxàlà/màxàlà	980 -kádà
963	charm (esp. to ensure wife's fidelity) (n)	kótègà	-	990 -kàg-, 293 -cáŋgó ? 1698 -tég-
32	chase (away)	kòβííŋgà	kòβííŋgà	129 -bìŋg-
515	cheek	ìtàmà	ítàmà	1652 -támà, 300 -cáyá
92	cheerful (become)	kòsàŋgàlàmúxà	kòsàŋgàlàmúkà	287 -cáŋg-
106	cheetah	dúmà ?	ísòβì ?	-
585	chest	kíkùβà	kíkùβà	1258 -kúbà
672	chest (of animals and birds)	kíkùβà	kíkùβà	1258 -kúbà
431	chief, headman	mùhányà ?	múkòlò	*ps* 436 -témi, 1195 -kódò, 1911 -yámì
431a	chief	mútèmì	mútèmì	1911 -yámì, *ps* 436 -témi
679	child, infant	mwàànà	mwáánà	1922 -yánà, 1923 -yánàké
597	child, offspring	mwàànà	mwàànà	1922 -yánà
886	chin	kílèzù	kìpópì	520 -dèdù
83	choose	kòsààgòòlà	kòsògòólà	255 -cààgòd-, 3651/2 -còd-
109	civet cat	wàlàlàmúkííyà	-	1878 -tùŋgò
255	clan	múgànà	ùxóò	779 -gàndá, 552 -dìàŋgò?
841	climb, ascend	kòtáántà	kòtáántà	-
550	clod, lump	ilòóŋgò	kíβòòmbà	-
851	close (the eyes, mouth, etc.)	kòtìindíílà, kòmùmyâ	kòtìindíílà, kòkùùmbà mùlòmò	617 -dím- ?
299	cloth	kìtàmbálà	kìtàámbálà	487 -dàmbá ?
235	clothe	kólyìíxà	kòlyìíxà	720 -dúád-, 728 -dúík- 1915 -yámb-
300	clothes, material	mwééndà/ myéèndà	mwééndà	1978 -yéndà, 873 -gùbò
305	cloud	ilùùndè	ilùùndè	748 -dùndè

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
817	coagulate	kògàándà	kògàándà	777 -gánd-
941	cobra (spitting)	nswìílà ?	ŋkòβòkò	1857a -túíd-
906	cohabit	kwìhàátá, kwìigónà	kwíyìŋgílíílà	2016 -yíŋgíd-
465	cold	mpèpò	mpèpò	1492 -pépò
624	come	kwííjà	wííjà	2045 -yìj-
505	come on suddenly, take in the act	kòβàgànìkìlyà	βòshíishà ?	284a -càŋgàn- ?, 1940 -yàŋk- ?
230	construct, put together	kònògèèlyà	kònògèlèlyâ	86 -bèèj-
471	cook	kótèéxà	kòtèéxà	734 -dúg-, 1701 -téék-
557	cook in water or fat	kótèéxà	kòsèlóká	1777 -tòòg-, 1778 -tòk-
43	cooking pan, small	kìlìílò	kìxàlììŋgílò	120 -bígá, 134 -bíyá
385	cool (become); get well	kòpòlà	kópòlà	1564 -pód-
265	copper, brass	shábà ?	shábà ?	-
283	copy a pattern	-	kòlòndèlélà	654 -dònd-
894	cork, stopper	kíkùndìkìlyô	kìkùndìkílò, kìfùnìxò ?	606 -dibò, 1268a -kúnìk- 1271a -kúndìk-
52	corpse, carcass	múβìimbà	múvìimbà	145 -bìmbà
1001	corpse (human)	múβìimbà	múvìimbà	145 -bìmbà 1832 -tòmb-
383	cough (vi)	kóxòlólà	kòkòlólà	1108 -kóód-
4	count	kòβàlyâ	kòβàlyà	9 -bàd-
100	country (our)	nsí yìíswè	ìnsì	331 -cí
14	courtyard	ísèésà	ìsèésà	55 -bánjà
852	cover (up)	kókòndìkìlyâ	kòkùndìkìlyâ	1268 -kúnìk-
285	cow	ŋòómbè	ŋòòmbè	1402 -ŋòmbè
1003	coward	mwóòβà	mwóóβà	2103 -yóbà
335	crab	ŋgèdèlàlógèègè	lìkáà ?	981 -kádá
520	crawl, creep	kwáágùúlà	kwàágúúlà	491 -dànd-
612	cricket	-	ìnsílìlì ?	1981 -yénjé

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
153	cripple	mùlèmà	mùgùlàázù	533 -démá
803	crocodile	ŋwɪ̀ɪ̀nà	màámbà ?	869 -gɔ̀ɛ̀nà, 870 -gɔ̀ɪ̀nà
319	cross (a river)	kɔ̀tàámbɔ̀xànìà	kɔ̀dɪxánìá	1051 -kɪ̀d-, 1921 -yámbɔ̀k-
846	crow (n)	ìkɔ̀ŋgɔ̀lɔ̀	ìkóŋgólɔ́	1233 -kóŋgɔ̀ɔ̀dɔ́
308	crown of the head	mpáándà	páwóóŋkù ?	-
79	crumple	kɔ̀kʊ̀nyàtyâ	kɔ̀kʊ̀njàkʊ́njà ?	1149 -kóny-
370	crush by pounding, pulverize	kɔ̀pɔ́ɔ́ndà	kɔ̀pɔ̀ɔ̀ndàpɔ̀ɔ̀ndà	1579 -pɔ́nd-
393	crust	βɔ́xɔ̀xɔ̀	βɔ̀ŋkókó	1125 -kókɔ̀
160	cry, wail	kɔ̀lɪ̀lâ	kɔ̀lílà	561 -dɪ̀d-
966	cucumber, small	màtàáŋgà	máámbèdè	-
736	cudgel	ŋxómè	ŋxómè	-
165	cultivate	kɔ̀lɪ́mà	kólɪ̀mà	568 -dɪ̀m-
950	cure, cool, heal	kʊ́pɔ̀lyà	kɔ̀pɔ̀lèèlyâ	1565 -pód-
355	cut	kʊ́pʊ̀tà	kɔ̀dʊ̀mɔ́là	1703 -tèm-
98	cut, lop	kʊ́nɔ̀gèlèlwà	kɔ̀pɔ̀ŋgólyâ	321 -cèŋg-, 10 -bàd-
117	cut to shape, sharpen to a point	kʊ́pʊ̀ùnjà	kɔ̀pʊ́njà	385 -cɔ̀ŋg, 1365 -nɔ̀ɔd-
365	dance (of men, to show courage)	kwídàáhì ?	kwíβɔ̀ɔ́là	*ps* 428 -támb-
53	dance	kwíígéyá ntùùntù	kwíígèyà, xóbìnàà	146 -bín-
622	dark, black	-àápì	nyɪ̀ɪ̀lɔ̀	2037 -yídɔ̀, 1561 -pìipí ?
481	darkness	kìlìì	kìlìì	1073 -kíti ?
824	dawn (vi)	kwéélà	wèéLá	1047 -kɪ́-
359	dawn, daybreak	wèélà	wèèléélà	-
744	day after tomorrow	májɔ̀ɔ̀lì	màjɔ́ɔ́lì	957 -jɔ́ɔ́dì
130	day	lʊ́sìkɔ̀/nsìkɔ̀	lʊ́sìkɔ̀/nsìkɔ̀	352 -cíkɔ̀, 1750 -tíkɔ̀
682	day-time	lyɔ́ɔ́nsì	lyɔ̀ɔ̀nsì	329 -cí, 955 -jɔ́bà
869	day (all)	lyɔ́ɔ́nsì lyɔ̀ɔ̀nsê	lyɔ̀ɔ̀nsì jélèlé	-
751	day before yesterday	májɔ̀ɔ̀lì	màjɔ́ɔ́lì	957 -jɔ́ɔ́dì

No	English	KìKíímbɔ̀-N	KìKíímbɔ̀-S	Proto-Bantu (Guthrie)
423	dead person	múhèlè	múchì	1074 -kí-, 1247 -kú
424	death	lúfù	nchà	1256 -kúò
931	decorate	kónògèèlyà	kònògèlèlyà	*ps* 161 -d èmbò, 578 -dìmbò
446a	defecate	kònìà	kònìà	1355 -ni-
631	denial	kósìítà	kósìità	1000 -káán-, 529 -dèm-
821	deny	kósìítà	kósìità	1000 -káán-
648	destroy, spoil	kóβiipyâ	kònúúnà	-
437	dew	lòmè	lòmè	1290 -mè
219	die (cause to); put to death *	kówòlágà	kògùlàályà	184 -bód(àg)-, 2095 -yít-
1027	die *	kòfwà, kògùlàálà	kòchà	1249 -kú
425	die	kògùlàálà	kòchà	1074 -kí-, 1249 -kú-
504	dig up, dig out	kòβùsòólà	kòpùsùúlà	1621-pùkòd-
503	dig	kòsɪ̀ímbà	ksɪ̀ímbà	1754 -tímb-
466	diminish, grow less	kòdòóhà	kòpòŋgóxà	1044 -kéép-
635	dip	kòsàpyà, kólɪ̀ílyâ	kòtàpyá	732 -dùb- ?, 1781 -tòmb- ?
49	dirt	βòcháfù	igáágá	1093 -kó
680	district, province, country	nsì	nsì	331 -cí
245	divide	kògàwòlà	kògàβà	754 -gàb-
512	divorce	kòlèxàànà	kòléxà	525 -dèk-
367	do, complete, finish	kòmàlyâ	kòmàlyà	1281 -mád-
366	do	kònòjà	kònògèlèlyà	1633 -tá- ?, 1710 -tènd-
60	dog	mbwà	mbwà	174 -bóà
292a	donkey	ndògóβè	mpúúndà	947 -jóbé ?
685	door	mulyàáŋgò	ŋkɪ̀lɪ̀	2039 -yigì, *ps* 153 -dàŋgò
415	dove (red-eyed)	ŋkùúndà	ŋkúùndà	939 -jìbà, 121 -kòónda
188	doze	-	kòtindɪ́ílà	1764 -tíŋgì(ìd)-
529	draw water (from well)	kótàpà mɪ́ɪ́jɪ̀	kòtàpà mìijɪ̀	1681 -táp-
215	dream (vt, vi)	kòlóótá ndòòtì	kòlòòtà	672 -dóót-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
328	dream (n)	ndòòtì	ndòòtì	*ps* 186 -dóóti
448	drink	kòŋwà	kòŋwà, kòŋwéélà	1378 -nú-
196	drizzle	mátòònyè	mànyúúnyù ?	-
780	drop, throw down	kòpáβà	kwɪ̀ɪ̀mbòlà	-
284	drum	ntúúntú	ntúúntú	844 -gòmà
598	dry (vt), set out to dry	kwáánɪ́xà	kwáánìkìlyâ	1924 -yánìk-
346	dry	-xàkù, -ywà	ŋkàkù	*ps* 557 -yómù
954	dry up, ebb	kòxàlà	kúpɪ̀tà	996 -kàm-, 1585 -pò-
345	dry up, become dry	kòxàlà	kúxàlà	975 -kàd-, 2161 -yòm-
289	duck	mbàátà	mbàátà	-
243	dust, cloud of dust	lóβùùβù	lòŋkóóndì	1230 -kòŋgó
628	dwell	kwííxàlà	kwííxàlà	2053 -yìkàd-
492	eagerness, zeal	wàáŋgówàáŋgò	wàáŋgúwàáŋgù	-
491	eagle, bird of prey	íxóónà	ìxòònà	-
563	ear	ítwì/mátwì	ítwì	1243 -kàtá, 1813 -tái
70	earth, land	nsɪ̀	ínsì	331 -cí
44	earthenware vessel for serving up food	nyùúŋgò	nyùúŋgù, lùbèéhè	120 -bìgá, 134 -bìyá
156	eat	kólyà	kúlyà	550 -dí-
900	effort, exertion	ŋgúlù	kwítùtùmúlà	890 -gòdù, 909 -gùdù *ps* 249 -gùdì
273	egg	igí/màgí	ìgí	809 -gí
443	eight	múnàánè	nàánè	1341 -nánè
705a	elbow	kìŋxòxóólà	kìxóxóólà chà múkònò	1130 -kókòdà
329	elephant	njògù	njògù	951 -jògù, 1708 -témbó
336	embers	íxàlà	múxàlà	980 -kádà
842	embrace	kwííkùmbàtílà	kòkùmbátílà	1211 -kómbàt-
394	end (come to an), cease	kòléxà	xósilà	351 -cíd-, 1281 -màd-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
952	escape, recover	kópònà, kòpòlògòxà	kúpònà	1565 -pód, 1578 -pón-? 1594 -pódòk- ?, 1736 -tííd- ?
899	examine, measure, test	xòpìímà	xòpíímà	797 -gèd-, 1519 -pìm-
45	excrement, dung	màbì	màbì	135 -bí
958	exorcise, drive out a devil	kòlàgòlà	kòdàgà	1602 -pòŋg- ?
784	explain	kòtèéŋgà	kòpàálílà	-
620	eye	liisò/miisò	liisò	2030 -yìcó
828	eyebrow	-	nyélè jà liisò	342 -cíti, 1153 -kópé 1079 -kígé, 336 -cígé
838	eyelash	ŋxòpè	lòkòómbì	1155 -kópé
587	face downwards	kòfùlámà, kòwùndáálà	kòxúbámà	-
686	face	βóshò	wóshò	391 -có, 347 -ció
940	fade, disappear	kólìmàáŋgílà	kòsílìkìlâ	618 -dím(ìd)-
891	faint, lose consciousness	kófwà kàβìimbá ká ŋgílì	xòpwèlâ màsàlà	617 -dím-
298	fall	kògwà	kògwà	863 -gò-
549	fall short	kòpòŋgòkìlwâ	kùpòŋgóxà	-
462	fan, wave	kòpùùgílà	kòpùtìlìlyà	1489 -pèèp-, 1595 -pòk- ?
764	far	kòtàlì	kòtàlì	507 -dè, 1645 -tádì
921	fat (be) (of animals)	kònònà	nòònù	815 -gìn-, 1370 -nòn-
922	fat (of animals)	-nónilè	-nóónilé	815 -gìn-, 1370 -nòn-
531a	father	dàádà, báábà	báábà	70 -bààbá, 1687 -tààté
382	father-in-law, mother-in-law	mùxwè, mùkwiiŋgwà	mùxwé	1092 -kó, 1174 -kóé
531	father (my)	dàádà	bàábà	7 -bààbá, 1686 -tààtá
687	fear	wóóβà	wóóβà	2103 -yóbà
652	feathers, fur	wòóyà	màgálà, wààgì	2140 -yòyá
848	fence, enclosure	lòóβà	lòòβà	2146 -yób-
858	ferment, turn sour	kòsásà	kòsàsà	241 -cácù
762	few (a), not much	-dò	kìdò	1044 -kéép-
757	fierce, sharp	kìtákì	xòlì ?	984 -kádì

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
421	fig-tree	-	-	-
422	fig-mulberry tree	múlòmbòlò	-	1246 -kúyú
216	fight	kwííkòβà	kwííkòβà	675 -dò-
804	fill	kwííjòlyà	kwííjòlyà	2049 -yijòd-, 1296 -mém-
176	fill a hole, stop up	kúkìβà	kòpùsfílà	602 -dib-
583	filter, strain	kògigídà, kòyòóŋgà	kòminyà	409 -còòj- ?
50	filth	ntàxàlálà	ìβílà	-
516	final, decisive	kúmpélò	kòsilà, kòdùŋgà	976 -kád-
760	fine, excellent	-sògà	-sògà	2046 -yìjà?
447	finger	lyààlà	lwààlà	920 -jádá
323	fingernail	ínòòŋgà	lwààlà	919 -jádá
474	fire	móòtò	móòtò	2138 -yótò 565 -dìdò
280	fireplace, hearth, kitchen	kìxòlyò, ìjííxò	ìjííxò ?	2056 -yíkò
970a	firewood (collect, cut) (vt)	kònénà	kòsòlèèlà, kòsàlá ŋkwì	1079 -téén-
413	firewood	ŋkwì	ŋkwì	1181 -kúì
191	fish up, pull out	kònyàmùlà	kwìipólà	-
126	fish (old Swahili *nswi*)	nsìpà	ínshì	333 -cí, 377 -cómbà 429x -cúí
190	fish (vt), trap fish	kòlúβà nsìpà	kòlùβà	638 -dób-, 731 -dúb-
400	fist	ŋgúmì	íŋgúúmì	1225 -kònt-
525	five	ìtàánó	ìtàánò	1662x -táánò
493	flap wings wildly, flutter	kòpàpàmúxà	kùpàpàmúxà	1447 -páp-
832	flatulence	kòβìimbèèlwâ	kòbyá ìmíímbì	432 -cùdì
384	flavoured (be properly)	kúxòlyà	kònógélà	710 -dòŋg-
907	flower	ìúà ?	ìúà ?	681 -dòβà
278	fly (house)	ŋgìŋgì	ŋgìŋgî	819 -gì
1028	fly (vi)	kònyááŋxà, kòpàpàmúxà	kòdíixà	1447 -pàp-, 889 -gùdùk-
1032	foam *	ífùlò/máfùlò	ìpùlò/màpùlò	1615 -púdò

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
502	foam	ífùlò/máfùlò	ìpùlò/màpùlò	1615 -púdò
143	follow (in order)	kòlòòndà	kòlòòndàlòòndà	654 -dònd-
142	follow	kòlòóndà	kòlòóndà	654 -dònd-
823	food supply for a journey	mpàámbà	mpàámbà	294 -cáŋgó
556	forest	ìpòòlù	ixòxò	260 -càká
584	forge	kòtyàánà	kùlùgútà nì mùgùßà	403 -cód-, 1743 -tían-
889	forget	kwììßìlà	kwìíwà	1989 -yìb(ìdìd)-
458	fork, bifurcation	mpàándá	ímpàántì	1407 -pácà, 1435 -pándà
442	four	jinê	jìnê	1345 -n(n)è
295	frog	chòólà	bòólà	2150 -yùlá, 1032 -kédè
574	fruit	ìtùùndà ?	viligì	*ps* 128x - cùm- ?
349	fry	kóxàliíŋgà	kòxàliíŋgà	982 -kádàŋg-
936	fully developed, be	kòxòméélà	kòkòmèélà	1190 -kód-, 1132 -kòm(àd)-
625	full (become)	kwííjòlà	kójòlà	2047b -yíjòd-
316	garden	bùsitáání	bùsitáání ?, kàmùgòóndà	-
419	gather (flowers, fruit)	kòyàßà	xóyàßà	2101 -yòb-, 1045 -kèt-
91	gathered (be), assembled (be)	kwííkùŋgànyâ	kwíkùŋgáánîâ	-
368	gazelle (Grant's)	swáálà ?	kàswà	(1075 -kíá) ?
454	gazelle, small (impala)	shà	pòónjò	1411 -pádá, 1075 -kíá
108	genet (kind of speckled civet cat)	ntùùŋgò, lìtfùùŋgò	ìntùùŋgò	1878 -tùŋgò
408	get, obtain	kòpàtà ?	kòpòkèèlà	1453 -pát-
684	ghost, sudden apparition	màsókè	ifùmìkìlà	-
568	giraffe	ntwiígà	ntwiìgà	*ps* 468 -tòigà
246	give away (present)	kófùmyà	kòfùmyà	1404 -pá-
449	give	kópèélà	kòpèélà	1404 -pá, 2085 -yíŋk-
916	give light to	kòmùlìxà	kùßàchá, kòmùlíxà	1330 -mòdìk-
815	glide, trickle	kòyélà	kògèlà	406 -códò

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
269	go	kòyà	kòyà	820 -gì-, 1975 -yènd- 2045 -yìj- ?
639	go in, come in, enter	kwiíŋgílà	kwiíŋgìlà	2083a -yíŋgìd-
63	goat	mbòlì	mbòli	185 -bòdì
694	goat, (he-)	ŋgùlàáti	ŋgùlàáti ?	1581 -pòŋgó
695	god	lyóóβà	mùlúúŋgù	715 -dòòŋgò, 955 -jóbà 2147 -yóbà
758	good	wósògà	nsògà	2046 -yìjá
388	goshawk (East African) (*Astur tachiro*)	-	ìsàànsì	-
68	grain (of cereal)	mpèkè	lòsàáŋxà	288 -càŋgà
696	grandfather	kóókò	kóókò	1204 -kóókò
697	grandmother	màámà	mbòyó	1282 màámá
432	grasp, hold in arm	kódiímà	kòkùmbàtìlyà	1267 -kúmbàt-
698	grass, reeds	másàànjè	ìsàànjì	393 -cóá
406	grate	kòxwààlàáŋgà	kòkwàáŋgólà	-
409	great, powerful, big	ìkòlò, ihányà	íkòlò	1195 -kódò
164	grief, sorrow	hùzúúnì ?	kòsàáyà ?	-
371	grind (grain with a millstone)	kòshà	kòsyà	344 -cì-
372	grind coarsely	kòbàlàágà	kòbàlágà	1409 -pád-
212	groove, furrow	-	xàlwííjì	-
801	ground, cultivated	mùgòóndà	mùgòóndà	897 -gòndà
405	grow up, get large, become great	kókòlà	kókòlà	1190 -kód-
913	grow (of plants)	kòlèémbà	kòlèémbà	724 -dù-, 1273 -mèd-
461	grown (be fully)	kòxómèèlà	kòkòlìlílà	1132 -k òm(àd)-, , 1190 -kód-
373	gruel, light porridge	mpáápò	mpàápò	1135 -kómb-
358	grunt, grumble	kòŋùúlà	kòsáàyà	-
205	guide aright	kòlòòndòólà	kwíxàlìxà páánsì	670 -dòŋgòd-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
351	guinea-fowl	ŋxàáŋgà	ŋxàáŋgà	1010 -káŋgà
701	gun	ŋgòòhò	mùdóji	1627 -pútí
702	hair	lɔ̀nyéè/nyélè	nyèèlè	2180 -yúídí, 2179 -yúédé
977	hair (long straight- of animals and Europeans)	βɔ́sìiŋgà	ùsìiŋgà ?	359 -ciŋgà, 1762 -tíŋgà
75	hair (white, grey)	mbyì	mbyì	22 -búi
703	hand (flat of)	ìxóófi	kìgàànjà	1500 -pí, 784 -gànjà 1156 -kóópì
157	hand, right	kólyɪ́ílà	mòlíílà	555 -díó
439	hand (left)	mùmósò	mósò	1316 -mócó
476	handle, haft	múpìnì	mpínì	1521 -pínì
779	hang in mid-air	kɔ̀nìŋìnɪ̀là	kɔ̀nìŋínílà ?	-
655	hard	lyááywà	íxàáxù	*ps* 243 -gɔ́m-, 2161 -yɔ́m-
377	hardship, distress	ɔ̀gàyò	βɔ́xàmù	-
294	hare	kàɔ̀ŋàándò	kásɔ̀ɔ̀yà	-
781	haste	wàáŋgɔ́wàáŋgɔ̀	wàáŋgɔ̀	1938 -yàŋgɔ̀
795	hate, detest	kɔ̀kìlwà	kɔ̀kìlwà	-
700	hay	màsàánjè gá ywà	βɔ́ŋxòxò	-
678	head, chief person	múkɔ̀lɔ̀	mùlàálà	1195 -kɔ́dɔ̀, 1265 -kúmù
356	head	mútwè	ìtwé	1808 -tɔ́è
352	head-pad	ŋxàtà, nziiŋgà	ŋkàtà	1016 -kátà
561	heap	ìlɔ̀ɔ́ndò	kàlúúndò	708 -dɔ́ndɔ̀
391	heap up, ready/set on fire	kɔ́pèémbà mòòtò	kɔ̀xòlyà mòòtò	1472 -pémb-
623	hear	kɔ̀tègèélà	kɔ̀tègéélà	1588 -pɔ̀d(ɪ̀k)-, 1698 -tég- ? 2043 -yígù-
543	heart	mòóyò	mòòyò ?	1115 -kódò, 1738 -tímà
944	hearthstone for putting pots on	mápigà	ìtèèŋgápìgà	1548 -pígà
893	heavy, serious, dull	ìtíímbù	ìtíímbù	631 -dìtò, *ps* 448 -tɪ̀mb-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
705	heel (of foot)	kítìiŋkínò	ìsàámbàtìlyò	1082 -kínà ?
681	*heifer*	ndógòòsà	-	-
418	hem, make a border	kòkòònjà	xòpìíndà	1522 -pìnd-
690	hen, fowl, chicken	ŋkòkò	ŋkòkò	1126 -kókò, 1203x -kókò
766	here	ípà, òxó	ìpà, ùxó	2215 -pà
863	hiccup	kísèkù	nsʉ̀pì	1180 -kòìkòì ?
800	hide (vt)	kóβisà	kòswèèxà	396 -cʉ̀èk-, 1546 -píc-
38	high, be (of meat)	kògùúndà	kòwòlà	153 -bòd-, 913 -gùnd-
326	highway	njìlà	njìlà	14 -bàdà, 940 -jìdà, 1435 -pàndà
309	*hill*	*kàlágòlò*	*kítùùndà*	*883* -gòdò, , *1841* -tònda
925	hip	inyòòŋgà	òlònyóóŋgà	2132 -yóŋgà/-nyóŋgà
317	hippopotamus	itònòómbò	ntòmòòmbò	908x -gùbó
396	hit with a hammer	kógòmèlélà	kókòβà	1133 -kóm-, , 1182 -kób- 1861 -túd-
706	hoe	ìsílì	isíβì	436 -cúkà, 803 -gèmbè
990	hold, arrest	kódìímà	kòβáámbà ?	1172 -kóát-
575	hole, nest	*ídòlòli*	*ìdólòli, ìshímò ?*	-
836	hollow out	kòsìímbà, kóxòòmbà	kòsìímbà	1134 -kómb-
816	home	*xòkáá yìiswè*	*kòwíisè, pàxáái*	*1020 -kááyà, 2097 -yító*
654	honey	wòòkì	wòòkì	2157 -yókì
150	honour	kòwééshìímù ?	kòkòlyá	1190 -kód-
797	hook (for pulling down branches in plucking fruit)	ŋxóntólò	nyèéŋgò	836 -gòbè <gòòb-
189	hook (fish)	ndòwáání	ndòánò	640 -dóbò, *ps* 181 -dóbànì
707	horn, ivory, tusk	lìinò, ípèèmbè	lìinò, ìpèèmbè	1476 -pémbè
288	horse *	-	-	-
708	house	nyùúmbà	ŋxááì, ìnyúúmbà	2168a -nyùmbá
263	how many?	jìíŋgà	*jìíŋgà*	*752 -ŋgá*

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
572	hump (of hunchback)	lòßégà	kìkùkù	84 -bègà
573	hump (of cow)	lòßégà	nùùndù ?	-
756	hundred	ìgànà	mìà ?	774 -gànà
320	hunger	njàlà	njálà	917 -jàdà
33	hunt	kóßèèndà	kògúúßà	904 -gúím-
34	hunter (professional)	múßèéndi	mùgùláji	904 -gúím-
35	hunting	kóßèèndà	kògúúßà	
227	husband	múgòòshà	mùgwíishà	1101 -kócì, 1102 -kócì 697 -dómè
808	hut	nyùúmbà	xáái, ìdìindígà	2168a -nyòmbá
709	hyena	mpìtì	mpìtì	1562 -pítì
1016	I	nèènè	ùnéénè	1344½ -ɲé
1013	idleness, sloth	óxàtà	úxàtà	529 -dèm-
901	ill (be); groan	kólwàálà	kòlwáálà	677 -dóád-
902	illness, (crippling)	ßólwìílè	úlwìílè	678 -dóádè, 679 -dóáidé
275	imitate	kòlòòndèèlà	kòlòòndèlélà	1995 -yíg-
16	in front of	kòßòlòòŋgólò	kòlòòŋgólò	69 -bèdè
353	in the middle of	pàxàtì	pàxátì	1018a/b -pà/mò-kàtí
118	incite	kòsòòŋgànìà	kòsòòŋgèlélà	383 -còŋg-
206	increase, make greater	kòòŋgèlyà	kóóŋgèlèlyà	2129 -yóŋg(ìdì)-, 1179 -kóíd-
155	increase	kòòŋgèèlyá	gòòŋgèlélà	2129 -yóŋg-
426	inheritance	ìsàálò, kòsàálà	màsàálò	-
542	inside, in	mùxàtì	mùxátì	1018 -kàtí, 443 -dà
353a	inside, middle	pàxàtì	pàxátì	1018 -kàtí
132	intestines	ßòlà	ùlà	442 -dà
389	intoxicated (get)	kóxòlwà	kùxòlwà	1107a -kódò-
513	iron ore	-	màbwé gà chóómà	2162 -yómà
264	iron	chòòmà	chóómà	1643 -tádè, 2162 -yómà
710	island	kìsíwà ?	kìsííwà ?	*ps* 94 -cèŋgà, 676 -dóá

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
2	itch	kóβàβà	kùnyègélà	4ii -báb-
460	jammed (become)	kòfyèènyèŋkélà, kòxwáámà ?	kùxwáámà ?	1421 -pákàm-
853	jaw (bone)	mázàkòlà	íkùpà	300 -càyá, 61 -báŋgá
960	jealousy	íβòβà	wìílù	2037 -yídò ?
271	journey	lògèèndò	mùsíínjò	808 -gèndò
606	judge (vt)	kòyááŋgólà	kòyááŋgòlílyâ	480 -dàmòd-
810	jump, leap	kòŋàáŋxà	kòdííxà	889 -gòdòk-
477	kidney	mpìgò	ìmpìgò	1549 -pìgò
218	kill	kówòlágà	kòwòlágà	184 -bód(àg)-, 2095 -yít-
677	king	mútèmì	mùtèmì	1911 -yámí, *ps* 436 -témì
787	kite	ínàándà	ìsáánsì	*ps* 413 -póŋgòè
347	knead	kòxàándà	kòlòβà	1001 -kànd-
348	knee	íyòòŋgò/ máyòòŋgò	íílù	729 -dúí, 722 -dú
427	kneel	kòtùùŋgámà, kósùxàámbà	kòtùùŋgámà	1261 -kúkàm- ?
607	knife	lóshò	nsììmè	1544 -píó
402	knife, thin, curved, broad-bladed	-	mpùlùlò	
704	knot	ígùùndò	ìgùùndò	1272 -kúndò
626	know	kómányà	kòmànyà	1284 -màn(i)
178	lake	ìzíwà ?	-	1934 -yànjà , 603 -dibà
151	lame (be)	kósùúntà	kòtètèmélà	-
511	lamp	tálà	tálà	1638 -tád- ?
99	land (dry)	nsí yá ywàà/ŋxàkò	nsí ŋxàxù/ŋxàlù	331 -cí
761	large, great, big *	-kòlò, -hányà	-kòlò	1195 -kódò
94	laugh	kòséxà	kòséxà	312 -cèk-
792	lay over on one side	kósùnîxà	kòkùùndìxâ	2067 -yín(ìk)-, 319 -cèndìk-
1000	lazy	múxàtà	ùxàtà	529 -dèm-
699	leaf, blade of grass	itìti/màtìti	ìsáánjì/màsáánjì	1928 -yáni
1025	leaf (tree)	itìti	ítìti/mátìti	1928 -yáni

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
911	leak, ooze out	kósòlólà	kòsòlólà	723 -dù-, 1614 -púd-
96	lean, bend down, slope	kwìnàmà	kwìnàmà	2069a -yìnàm-
536	lean on, rely on	kòsèèntàmìlà	kòtègémélà ?	319b -cèndàm- ?
796	lean, become; grow thin	kògàándà	kògàándà	*ps* 313 -kónd-, 2125 -yónd-
535	leaning (be)	kósèèntámà	kwéégàmìlà	319b -cèndàm-
613	learn	kwìífúúndìshâ ?	kwìífúúndìshâ ?	1995 -yíg-
546	leave, permission	lòhúsà ?	lùúsà ?	463 -dàg-
1011	leave over	kòléxà, kósìigàlyâ	kòsìgàlìlyâ	345 -cíád-, 525 -dèk- *ps* 102 -cííc-/-cííc-
547	leave, go away	kówòóxà	kòwóóxà	197 -bóók-, 820 -gì-
544	leave (off)	kòléxà	kòléxà	525 -dèk-
975	left over, (be); remain over	kósìigàlyâ	kòsìgàlìlyâ	1747 -tígàd-, 2052/3 -yikàd-
310	leg, foot	mùgòlò/mìgòlò	mùgólò/mìgólò	884 -gòdò
774	lend, borrow	kwáálùmyâ	kwàálùmyâ	1899 -yàdìm-
107	leopard	nsòβi	nsóβì	399 -cóbì
878	lick (vt)	kóxòòmbà	kòxòòmbìishà	485 -dámb-
134	lie down	kògónà	kògónà	454 -dáád-, 483a -dàmbàdàd-
250	lie on one's back	kògónà kà nságà	kògónà ká nsàgâ	764 -gàdàm-, 851 -gòn-
791	lift up, pick up	kwìinòlà	kwìinòlà	197 -bóók-, 2064 -yìmòk-
467	light in weight	ìbòòhù	kàpéélù	1605 -pòòp-
304	light, sky	ilùùndè	βòcháányà	880 -gòdò
805	lightning	láádì ?	kìmùlì ?	-
657	lime, whitewash	nswàáxàlà	nswàáxàlà	-
213	line, row	mùsìtáálì ?	mòkìlìlì, mùsìtáálì ?	-
659	line, fishing	ŋgùsà	lògùsà	-
103	lion	nsìimbà	nsìimbà	357 -cìmbà
198	lip	mùlòmò	mùlòmò	651 -dòmò
956	listen	kòtèkèlézyâ	kòtègèlèlyà	1698 -tég-, 1589 -pód- 1589a -pódìk-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
972	listless (be)	kònyòŋónyà	kùnyèxà	-
1024	liver	ítémà	ítèmà	1739 -tímà
429	livestock (keep)	kòsáβà	kòsáβà	-
819	lobster	-	-	-
794	locust	nzìgè	ínzìgè	827 -gigè
155a	long (become)	kòlìihà	kòtààlíímpà	545 -dèèp-
144	long	-liihù	kòtàlì	*ps.* 164 -dèèpù, 1645 -tádì 507 -dè
131	look after, care for	kótùùnzyà	kòlèlà	441 -cúŋg-, 510 -dèd-
871	look after grazing cattle, help a sick man on the road	kòdìímà	kòdíímà	441 -cùŋg-, 550 -dí- ?
354	look at, examine	kòkùúnà	kòkúúnà	641 -dòd-, 501 -dáŋg-
354a	look around	kòkùúnà	kòlàβàláβà	501 -dáŋg-, *ps* 142 -dàb-
200	look for, hang around (to get something), pursue	kòdòβèélà	kòdóβèlèlà	-
973	loose (be); faint, weak	kònyòŋónyà	kòxàtálà	523 -dègìd-
181	lost, get	kòlìmíílà	kòpwéélà	618 -dìm(ìd)-
1023	louse	mpànì	mpáni	446 -dá
769	love, want	kótògwà	kùtògwá	1974 -yènd-
934	lung	màpòópò	màpóópò	1607 -pòòpò
713	magic *	βòlógì	βòlógì	646 -dògì
714	maize	ìgàágwè/màgàágwè	ìgáágwè/ màgáágwè	-
521	make offerings to the dead	kwíisèéŋgà	kwíisèèŋgà	1659 -támb
226	male	ìgòóshà	ìgwíishà	697 -dómè, 1101 -kócì 1102 -kóci
10	mamba, green (kind of poisonous snake)	ŋxòβòxò	ŋkóβòxò	40 -bàmbà, 41 -bámbà
793	many	nyííŋgì	nyííŋgì	2082 -yíŋgì
1019	many *	nyííŋgì	nyííŋgì	2082 -yíŋgì

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
897	marriage	kwìitòólà	ìtòólè, ndòà ?	1175 -kʊ́ɛ́d-, 1774 -tóód-
895	marry (of man)	kòtòólà	kwíítòólà	1774 -tóód-, 323 -céŋg- 1175 -kʊ́ɛ́ɑ́· ?
896	marry (give in marriage-of parents, priests)	kòtòólyâ	kòtòólyâ	1774 -tóód-
814	master	-	mútèmì	-
888	match, harmonise (vi)	kwííxòlà	kòlíŋgànílà	583 -dìŋg-, 584 -dìŋg(àn)-
935	mature	kòmèèlù	kòkòlíílà	1132 -kòm(àd)-, 1645 -tádì ?
596	meat	nyàmà	nyàmà	1910 -(n)yámá
259	medicine, remedy	βògàáŋgà	ògàáŋgà, ùgòtà	787 -gàŋgà
260	medicine (art of medicine man)	βófùmù	úfùmù	1868 -túmò, 787 -gàŋgà 471 -dàgʊ̀d-
261	medicine-man	múfùmù	múfùmù	786 -gàŋgà, 1868 -túmò ?
90	meet	kwáágàànà	kwíítááŋgà	284 -cáŋg-
861	melt	kònyémèntúkà	kòpéélà	1883 -yàbìk-
845	midwife	-	mùlélííshà	-
859	migrate, move away	kòsàámà	kòsáámà	265 -càám-
1030	milk (n)	máβèélè	màβéélè	73 -béédè
20	milk (curdled), curds	mbòβòtò	màβáálè	
19	milk, (fresh) (n)	màshóshò	màβéélè	73 -béédè
903	millet (bullrush)	βòβèlè	òβélè	70 -bèdé
290	millipede	ìgóóŋgòlò	ìgóóŋgòlò	859 -góŋgòdó
73	mix (ingredients, 'season food')	kókàlííŋgà	kòsàlìŋxànìà	286b -cáŋgànì-
72	mix, put together	kòsàànjà	kòkùlùgànìà	286 -cáŋg-
363	monkey (small lightish-coloured)	ntòòmbìlì	ntòòmbìlì	-
362	monkey (colobus- (with long black silk hair, white on shoulders)	ntòòmbìlì	ŋkùùŋkù ?	-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
361	monkey (small, dark-coloured)	-	-	-
716	moon	mwéélì	mwéélì	1965 -yédì
609	moonlight	mpèèmbá mwèèlì	mwéélì	1964 -yédi
59	mosquito	mbò	mbú	172 -bó
436	mother	màáyì	mááyì	1289 -mààyó
65	mould (pottery)	kòβòòmbá	kòβóómbá	199 -bóómb-
717	mountain	lògòlò	kìtóóndà	883 -gòdò, 707 -dóndò, 1842 -tòndà
163	mourning	kìlílò	kìlílò	567 -dìdò
1026	mouth	mùlòmò	mùlòmò	652 -dòmò
272	movement	lògèèndò	lùgèéndò	808 -gèndò
979	mud, mire	màlòlò	ìntópè ?	1797 -tòpè, ps 466 -tótò
642	mushroom	wìipwà	wìípwà	2103 -yóbà
152	mutilated (be)	kòlèmàálà	kòlèmáálà	534 -démàd-
281	name	líínà	líínà	2068 -yínà
539	namely	yàáni ?	kítì	-
403	nape (of neck)	-	íŋxòti, ŋkìiŋgò	1162 -kòti
256	navel	íwùùmbù	piwùùmbù	1224 -kóndó ?
765	near	píípì	píípì	1274 -kúpí
379	neck	ŋkìiŋgò	íŋkìiŋgò	1086 -kí(i)ŋgò
843	need, request	kòpòógà	kòlóómbà	-
962	new	mpyà	mpyá	1505 -pìà
718	night	βótìkù	βótìkò	1751 -tíkò
755	nine	kèéndà	kèéndà	1039 -kèndá
484	nose	mpólà	mpòòlà	1591 -pòdà, 960 -júdò *ps* 512 -yídò
211	number	nàámbà ?	kòβályâ, igòòŋgò, nàámbà ?	664 -dò(ò)ŋgò
237	oar	-	mútìiŋxò	1014 -kápí

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
939	obstruct	kópììŋgà	kòsiitìlyà	1532 -píŋg-, 529 -dèm- 1069 -kíŋg-
48	offspring	múgànà, mwàànà	ßòléli	1922 -yánà
66	oil (from plants)	-	mákùtà	211 -bótò
435	oil	mákùtà	mákùtà	1278 -kútà
818	old times, the past	xálè	xálè, pàmyáàxà	983 -kádè
411	old person	mùxòómbì	mùlàálà, mùxòómbi	1197 -kódò
410	old	nsáxàlò, ìxámà, lyà xálè	nsáxàlò	1196 -kódò
214	one-eyed (being)	nsòòŋgò	nsòòŋgò	388 -còŋgò
440	one	lómò	ìmwí	1314 -mó
590	open mouth wide	kwáásámà	kwààsámà	1889a -yácàm-
984	open	kòdògòlà	kòdìgólà	736b -dùgùd-, 2041 -yìgùd-
829	open (set ajar) a door	kòdògòlà	kòdìgólà	736b -dùgùd-, 2041 -yìgùd-
876	order, direct	kòlàgìlìlyà	kòlàgìlìlyâ	496 -dàgìd(i)-
961	ostrich	mbúúnì ?	mbúúnì ?	-
640	our(s) pl. 1st person)	yìíswè, yìitù	-à kówiiswè	2097 -yító
506	out (go), go away	kófùmà	kófùmà	1622 -púm-
324	outside	hàánjì	páánjì	928 -pà/-kò -(ɲ)jé
217	overcome; win, vanquish	kòkiíndà	kòkííndà	1084 -kínd-
995	owed by, be	kòlòóndà	-	665 -dónd-
835	oyster	-	-	-
207	pack (luggage)	kòtúúŋgà	kòtúúŋgà pà lòmwí	1877 -tùŋg-
208	pack, press together	kòkímàŋgílà	kòkiìndìlà	-
456	pack, flock, group	ìdáálè	ìdàálè/màdàálè	-
457	pack, bale, bundle (n)	múligò	múligò	1833 -tòmbà
236	paddle (n) *	-	mùtìì̀ŋxò	
342	palate	ílàáŋxàmìlò	kìnááŋxò	-
9	palm (date)	mùtééndè	mùtèèndè	1712 -téndé
719	palm-wine	ntílì	ntìlì	-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
257	*palm (of hand)*	*kìgàánjà*	*kìgàànjà*	*784 -gànjà*
6	palm (raphia)	ùkííndù ?	-	21 -bádé
7	palm (borassus)	mùhàmà	ìpàmà/màpàmà	
8	palm (oil)	mùchìkíchì	mùchìkíchì ?	1 -bá-
459	*palpitate, flutter, tremble*	*kùtètémà*	*kòtètèmà*	*1861 -túd- ?*
47	parent, s/he who begets	mùlèli	mùβàáli	136 -bíád-, 208 -bót-, 512 -dèd-, 1449 -pààp-
720	parrot	kàsúkù ?	nyònyì ?	-
232	pass, surpass	kókìlà	kókìlà	1536 -pít-, 1051 *-kíd-*
325	path	njìlà	njìlà	940 -jìdà
159	pay	kòlípà	xìlìpà	589 -dìp-
600	pay attention, take care	kòkùúnà, kwááŋgàlílà	kòkùúnà	501 -dáŋg-, 1026 -kéb- ?
820	peel, shell	kòpàátà	kòpáátà	1409 -pád-
12	peg	lòβàgò/mbàgò	ìtàántílò	*ps. 6* -bàgò **
11	pegs (tent)	lòmàámbò/màámbò	lòmàámbò/màámbò	44 -bámbò
494	penetrate	kwíífènyèŋkèzyà	kwìíŋgílà	2016 -yíŋgìd-
721	penis	ìlógà	kìlògà	155 bódò
884	penknife, lancet	lóshò	kàsílí	1544 -pió, 436 -cúkà
558	person	mùúntò	mùúntò	1798 -ntò
638	pestle	mùúnsì	mùúnsì	2076 -yìncì
312	pig	ŋgùlùβè	ŋgùlùβè	888 -gùdùbè
414	pigeon, kind of	ŋkòòndà	njíβà	1121 -kó(ó)ndá
579	pile up, pile loads on head	kwíítwííxà	kwíítwííxà	705 -dònd-, 1812 -tóík-
479	pinch, make narrow	kòsìnà	kòsìnà	*ps* 111 -cìn-,, (1552 -pìn(i)-)?
357	pipe (tobacco)	mùtèèmbà	mùtèèmbà	-
552	pit, hole	líínà	líínà	2013 -yìná, 582 -dìndí
974	place, put (vt)	kòtòólà, kótìtílà	kòtòólà	1818 -tóód-
722	place (n)	pàántò	páántò	2215 -pà + 1799 -ntò
892	place of the dead	kózimù	kwíítàámbíxà	715 -dòŋgò, 619 -dímò

No	English	KìKíímbɔ̀-N	KìKíímbɔ̀-S	Proto-Bantu (Guthrie)
225	plait	kɔ̀síβà	kɔ̀siβà	693 -dɔ̀k-
932	plant, sow	kɔ̀pàántà, kɔ̀hàámbà	kɔ̀βyáálà	1432 -pànd-
510	platform	-	ìtàántílɔ̀	1640 -tádà
834	please, satisfy (vt)	-	kɔ̀tɔ̀gwâ	-
93	pleased (be)	kɔ̀tɔ̀gèzìwà	kɔ̀nɔ̀gélà	312a -cèkìd-
13	plot of ground	kìwàànjà ?	ìsèèsà	14 -bádà
647	plunder (a town)	-	kɔ̀βàámbà	-
1014	plunge into, cause to sink	kɔ̀dùmbùkílyâ	kɔ̀sùtílyâ	2026a -yíbìd-, 593 -dìàm-
114	poke	kɔ̀pèmbèlélyâ	kɔ̀xɔ̀lèèlyâ	365 -cɔ̀ɔc-
737	pole, thin	lɔ̀kítɔ̀/ŋkítɔ̀	lɔ̀sítɔ̀	-
111	polish, clean by rubbing	kɔ̀pàlàáŋgɔ́là	kɔ̀sìŋgà	1409 -pád-, 1693 -tèdìd-
177	pool, pond	ìlàámbɔ̀	kálàámbɔ̀	603 -dìbà?
923	porcupine	nɔ̀ɔ̀ŋgɔ̀lì	nɔ̀ɔ̀ŋgɔ́lì	1376x -nɔ̀ŋgɔ́
374	porridge (stiff)	βɔ̀gàlì	βɔ̀gálì	765 -gàdì
42	pot (metal)	ìkópò	ìxópò	-
41	pot, vessel	kìsèmè/vìsèmè	ìŋgègélè	2173 -nɔ̀ŋgɔ́ /nyɔ̀ŋgɔ́
39	pot, mug	mùxébè	mùnìimbà	-
40	pot, cooking (earthen)	nyùúŋgɔ̀	nyùúŋgɔ̀	2173 -nɔ̀ŋgɔ́ /nyɔ̀ŋgɔ́
749	potato (sweet)	káfù	kìlɔ̀ɔmbɔ̀	-
646	potter's kiln	ìtìmílɔ̀	ishèléélɔ̀	-
369	pound (grain in a mortar to get off the husks)	kópɔ̀ɔ́là	kɔ́tùlà	1807 -tɔ́áŋg-
441	pour away	kwìità	kwiítà	2094 -yìt-
641	pour	kɔ̀tìtílà	kɔ̀dùmbùgìlyâ	2094 -yìt(ìd)-, 435 -cùk(ɔ̀d- ?
748	pregnancy	ndà, míítùùŋgɔ̀	ndà	443 -dà
636	pregnant, be	kɔ̀βì ní ndâ/ná míítùùŋgɔ̀	kɔ̀βà nífíndà	2062 -yímìt- ?
599	prepare	kɔ̀nɔ̀gèlélyâ	kɔ̀nɔ̀gèlèlyà	-
553	press out (oil seed, sugar cane)	kɔ́xàmà	kɔ̀xàmà	995 -kám(ɔ̀d)-
986	produce, put forth, display	kɔ́fùmyà	kɔ̀fùmyà	1622 -púm-, 1916 -yàmb-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
909	prominent (be); put out	kúfùmíílà	kópùmìlyâ	1263 -kúm- ?, 1622 -púm-
518	pronounce	kòtèéŋgà	kówùɣà	1719 -tèt-
340	protect by charm (medicine)	kósàlà	kósàlà	990 -kàg-
947	protect by charms (target)	kóxàgà	kóxàgà	990 -kàg-
475	puff-adder	kìpílì, ímòmà	kìpílì	1513 -pídì
244	pull	kòkwéésà	kòkwéésà	749 -dùt-
173	pull up, come to a halt	kwìímà	kwíímà	2006 -yím-
172	pull up, root up	kòdùbólà	kòlimbólà	1814 -tób(òd)-?
833	pull, drag	kòkwèésà	kòkwèésà	749 -dùt-
57	pump	ìbóómbà	ìbóómbà	-
548	push	kòsòóŋxà	kòtééŋkà	1758a -tíndìk-
992	put, place, set	kòtòólà	kòtóólà	1818 -tóód-, 122 -bíík-
887	put together for comparison	kògèlànìlyà	kògèlànìlyâ	795 -gèd-
969	put a pot on the fire	kótèèŋgà	kòtééxà, kòtèéŋgà	1696a -tédìk-, 1702 -téék-
981	put together, compose	kòtòóŋgà	kòtùùŋgáníâ	1877 -túŋg-, 625 -díŋg-
862	python	nsàtò	nsàtó, nsàwàákà ?	297 -cátò
656	quarrel (vi)	kwííkènià	kwíítàchâ	-
180	quench, extinguish	kólímyà	kòlìímyâ	617 -dìm-
485	quiet (be)	kwííxàlà sèlè	kwììxàlà nyéétè	1589a -pódìk-
76	rain	mbùlà	mbùlà	225 -búdà
917	rain (vi)	kótòónyà	kùtóónyà	1787 -tóni-/tóny-, 1352 -nì- 1861 -túd-
1006	rains, the lesser	mwáánòlì	chóónsì	-
197	rainy season	kitikò	kitikò	1751 -tíkò ?
580	rumble	kògilímà	kwíítòtòmólà	1853 -tòtòm-
26	rat, kind of	ŋkòsò	nsèèŋgì	306 -cèŋgì,
488	rat (field)	ŋkòsò	mbèβà	1597 -pókò
24	rat	ŋkòsò	mbèβà	65 -bèbà, 1103 -kòcòè, 1597 -pókò

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
25	rat- (very large, long-tailed)	ŋkùtò	mbèβà	1597 -púkù
883	razor	lògèèmbè	lògèèmbè	803 -gèmbè, 1328 -mòò
949	read	kòsòmà	kòsòmà	379 -còm- ?, 1543 -píóm-
1007	*reap, harvest*	*kwìímbòlà*	*kwìímbòlà*	*231* -bún-, *ps 287* -kèc-
523	receive	kòpòkèèlà	kòpòkèlà	1709 -téén-
537	reed	màtètè	màtètè	1571 -pòkìd-
632	refuse, say no	kósìítà	kòsíítà	1723 -tété
633	reject, refuse, dislike	kòkilwà	kòsíítà	1000 -káán-, 529 -dèm-
545	remain, stay behind *	kósìígà	kòsíígà	1000 -káán-, 529 -dèm-
1035	remain, stay	kósìígà	kòsíígà	*2058* -yím- *?*
840	remember	kwííjòkìlà	kwííjòkìlà	1747 -tígàd-, 2052 -yìkàd-
499	resemble *	kwííxòlà	kwííxòlà	2053 -yìkàd-, 1747 -tígàd-
879	resemble (very closely)	kwííxòlà	kwííxòlà	2098 -yítòk-, 1215b -kòmbòk-
1031	resemble *	kwííxòlà	kwííxòlà	1612 -púán-
149	rest heavily on, be burdensome	kwíílwà	kòtìímbìlà	1612 -púán(àn)-, 654 -dònd-
964	rest the cheek on the hand (in brooding mood)	kwíídìímá ìtàmà	kwìsùmátà	1612 -púán-
957	rest, take a holiday	kòsùúpà	kòsùúpà	527 -dèm(ìd)-, 528 -dèm
249	return, go back	kòshòòxà	kòtúúβà	1267 -kúmbàt-
1004	return	kòshòòxà	kòtúúβà	1819 -tóód(i)-
500	revive	kòβèèmbòòkà	kòfùfúlà	-
318	rhinoceros	mpèlà	mpèlà	-
988	rib	lòβálù/mbàlù	lòβàlù	596 -dìùk-
473	ripe	ípìilè	ípìilè	1460 -pédà
996	ripen (vi) *	kòpyà	kòpyà	30 -bàdù
472	ripen (vi)	kòpyà	kòpyà	107 -bíd-, 117 -bídù-
				1503 -*pí*, *1504* -*pí*
				1504 -pí, 107 -bíd-
				107 -bíd-, 1504 -pí

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
209	river	mòóŋgò	móóŋgò	662 -dòŋgà, , 664 -dò(ò)ŋgò ?
239	roar, rumble	kòlîlà, kòlìindìmà	kòlùlùmìlà	2000 -yíjì
644	roast	kòtímà	kòtìmà	740 -dùm-
350	roast (in/by fire)	kòtímà	kòtimìlílà	2111 -yòk-
806	rock	ìbwé ìpáámpà	ìbwè	2111 -yòki-
291	rooster (cock)	njògòlò	njògòlò	1642 -tádè
169	root	mùlì	mùlì	1203y -kúkú +, 697 -dómè
29	rotten	-βólílè	mbòlù	591 -dì
1012	round (be)	kwíítìiŋgà	kòpìlìŋgàníà	153 -bòd(ú) **
183	round (go), turn round	kóβìlìŋgàníà	kòpìlíŋgà	625 -díŋg-, 189 -bódòŋg-
999	round, become	kwìiβìliŋgàníà	kòpìlìŋgàníà	625 -dìŋg-
110	rub	kòkòlòòntà	kòsííŋgà	*189 -bódòŋg-*
50a	rubbish, garbage	mùtàxàlàálà	ìβílà, ìgáágà	358 -cìŋg-, , 1186 -kóc-
321	rubbish heap	lìínà lyà mátàkàlàálà	ìβílù	
826	run	kòkìímbìlâ	kòkìímbílà	918 -jàdà
				1062 -kímbìd-, *ps*519 -yítòk-
522	sacrifice	sàdákà ?	kwíísééŋgà	1742 -tíy-
723	salt	múúnyú	mùlééŋgè	-
95	sand	mùsèŋgàsèèŋgà	βòlóóŋgò	1396 -nyò
630	satiated (be); have enough to eat or drink	kwííkòtâ	kwííkótà	288 -càŋgà
				2057 -yíkòt-
788	satisfy	kòtògèèzyâ	-	
251	say to, tell to	kòwìílà	kòwíílà	701 -dòmb-
783	scorpion	ŋgè, ŋhòmì	èŋgè, xàxòmì	*ps* 38b -búíd-
453	scrape	kòpàlà	kòpàlà	1133 -kóm- ?
855	scrape, grate	kúkwàáŋgúlà	kòséénsà	1409 -pád-, 1131 -kókòt-
856	scratch, grate *	kòsòβà	kósòβà	1409 -pád-
668	scythe, sickle	ìmòózyò	ìmóózyò	1552 -pin(i)-, *ps* 111 -cìn-
				-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
84	search for	kòpòógà	kòpúúgà	366 -cóód-
85	search diligently	kòpésà	kòpàlísà	259a -cákùd
738	seat, stool, chair	kísùùmbì, kítì ?	kítì ?, kígòdà ?	1874 -túmbí, 1692 -tébè
770	see	kǒwònà	kǒwònà	164 -bón-
67	seed	mbèèyò	mbèèyò	96 -béyó, 211 -bótò
404	seize	kǒdiímà	kòßáàmbà	1172 -kúát-
611	self	mwèènê	yèènê	1970 -yéné
302	sell	kògòlyà	kògòlyâ	876 -gòd-
570	send	kótòmà, kòlàgìlìlyà	kótòmà	1831 -tóm-
451	separate, set apart	kògàßàníà	kòlègòŋxàníà, kògàßàníà	525 -dèk-
450	separate, leave each other	kòlèxàànà	kwiíléxà	525 -dèk-
534	set a trap	kótègà	kótègà	1698 -tég-
868	set (of the sun)	kólòxà	kògwíílà	-
971	settled (be); be in good order	kòtèxàànà	kònògèlèlyâ	1702 -téék-
754	seven	mpúúŋgàtì	mpùúŋgàtì	*ps* 419x -púŋgàté, *ps* 419y -púŋgàtí
1033	sew *	kósùmà	kòsùmà	1865 -túm-, 378 -còn-
589	sew	kósùmà	kòsùmà	1865 -túm-, 378 -còn-
135	sexual intercourse with (have)	kwiinyòmà	kwiígòníà	1781 -tòmb-, 851 -gòn-
691	shadow, shade	mùlúlè, mùdàxà, mùnyùmì (human)	kìnyóómì	1492 -pépò
867	shame, disgrace	nsònì	nsònì	380 -cóni
116	shame	nsònì	nsònì	380 -còni
724	shame, modesty	nsònì	nsònì	380 -cóni
386	sharp (be)	kóógípà	kòkàlípà, kòßá kìxàxà	978 -kád(ìp)-, 1803 -tó-
920	sharpen	kònòólà	kònóólà	1365 -nòòd-
915	shave	kósèénya	kómwà	1317 -mòòg-
603	she, he	ŋwèènè	mwèènê	1173 -kúé, 1954 -yé(é)
287	sheep	ŋxòlò	ŋxólò	*ps* 305 -kòdò

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
1009	shell, cowrie	nsìimbì	nsìtà	42 -bámbá, *ps* 110 -címbi
822	shell	-	íxònjè	-
725	shield	ŋgòlà	ŋgáò ?	906 -gùbà, 756 -gàbò
712	shin (bone)	múlòòndì	múlòòndì	1526 -píndí ?
968	shiver, shudder *	kòtètèmà	kòtètémà	1726 -tètɪ̀m-, 1012 -kàŋk-
528	shiver	kòtètèmà	kòtètémà	1012 -kàŋk-, 1726 -tètɪ̀m
434	short	-kùpì	íkùpì	1274 -kúpí
430	shoulder, tip of	-	ìβègà	84 -bègà
588	shoulder	ìβègà/màβègà	ìβègà/màβègà	84 -bègà
839	shout	kókòβá ìbòbò	kòkòβá ìdóólò	-
946	shrivelled (be); wrinkled	kwìikùnyátà	kwìisináásinà	-
763	sick	-lwɪ̀ɪ̀lè	-lwìɪ̀lè	677 -dóád-, 679 -dóáídé
870	sift	kòyóóŋgà	kòyóóŋgà	969 -jùŋg(òd)-
615	sing	kwíímbà	kwɪ̀ɪ̀mbà	2009 -yímb
3	singe	kóβàβà	kòβàβà	5 -báb-
980	sink, be drowned	kòsápà	kòsàpà	755a -gàbɪ̀d-, , 593 -dìàm-
170	sink	kògàbílà	kòdòdòmèlà	-
726	sister (his)/ (her) brother	ìlòònmbò	ìlóómbò	703 -dòmbò
627	sit	kwìixàlà	kwìixàlà	2052 -yìkád-
753	six	múxàágà	mùxàágà	1670 -tántàtó
785	size, measure	ŋgèlò	àlí mbɪ̀	795 -gèd-
123	skin (of person)	ntíílà	ntíílà	563 -dɪ̀dɪ̀, 1095 -kóbà 1003 -kándà
124	skin/rind (of fruit)	ìtìti	ìtíítì, màkùùmbà	1003 -kándà
303	sky	ìlùùndè	màlùùndè	880 -gòdò
865	slander, accuse falsely, often secretly	kòsòŋgèélà	kòsòòŋgéélélà	*ps* 80 -céb-, 383 -còŋg-
470	slap	kòkòβà ìkòófì	kókòβà, kòpàátólà	1182 -kób-
970	slash	kópùtà	kòsèmùlà	1703 -tém-, 321 -cèŋg-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
220	slaughter	kòsɪ̀ínjà	kòsíínjà	341 -cínj-
727	slave, bond servant	músèsè	mùjìimpà, múβisà, mwàásì	-
728	slave (female)	músèsè	mwàásì	1922 -yánà + 986 -kádì
729	slave, (male)	músèsè	mwàásì	-
136	sleep (vi)	kòɡónà ndòólò	kòɡónà	455 -dáád-, 851 -gòn-
731	sleep (n)	ndòólò	énđòòlò	1 851 -gòn-, 821 -tòdó
730	sleeping-place, accommodation	βòlɪ̀ílɪ̀	pà kúgónà, pà ògónò	635 -dó, 455 -dáád-
967	slip, be slippery	kòtyèlèmúxà	kòtyèlémúkà	1693 -tèdɪ̀d(ì)-
1021	small	-đò	kàđòkàđò	1362 -nìíní
332	smallpox	ndòβɪ̀	ndòβɪ̀	-
241	smell (sweet) (vi)	kònùhìlílà	kòtùkɪ̀lílà	1380 -nùùk, 1386 -nùùŋk-
242	smell (bad, of fish) (n)	kònùúhà	kòtúxà	390 -cò ?, 1380 -nùùk-
240	smell (bad) (vi)	kònùúhà	kòtúxà	1380 -nùùk-, 1386 -nùùŋk-
629	smoke (n)	lyóókɪ̀	lyóóki	2114 -yóki
428	smoke (give out) (vi)	kòfúxà	kòsùsùmóxà	596 -dìòk- ?
387	snail, slug	ŋxòlòfù	ŋkòònjè	981 -kádá ?
837	snail	ŋxòlòfù	ŋkòònjè	-
145	snake, serpent	njòxà	njòxà	2112 -yókà
158	snare, trap (n)	mútègò	mùtègò	1699 -tégò
864	sneeze	kòtyààmúlà	kòtyààmúlà	-
924	sniff, smell out	kòtùchâ	kòtùùchâ	1386 -nùŋk-
296	snore, snort	kòxòlómà	kòxòlòmà	852 -gòn-, , 1113a -kòdòmìdò
69	soil	òlóóŋgò	òlóóŋgò	688 -dòŋgó
732	song	lwíímbò	lwíímbò	2010 -yímbó
616	songs *	nyíímbò	nyɪ̀ɪ̀mbò	2010 -yímbó
36	soot	mákìlì	mákìlì	141 -bídò, , 1077 -kídì
195	sorcerer	mùlógì	mùlògi	646 -dògi
201	sore	kìlóóndà, ŋxòóŋxò	kìlóóndà	656 -dòndà

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
734	soul, spirit	mùyì	mòòyò ?	1738 -tímà, 1115 -kódò 2143 -yòyò
331	sound, cry	mùlìlò	ìdóólò	567 -dìdò
64	space (open)	lòómbògà	ìtàŋgàlàlò	190 -bùgà
82	spark	nsàsè	ènsàsì	243 -cácè, 244 -cácì
253	speak	kòtèéŋgà	kúùgà	770 -gámb-?, 1912 -yámb- ?
733	spear (n)	íkìmù	mùxósà	*ps* 453 -timò, 1868 -túmò
137	spend time	kòsòònsòmólà	kòsóópà	-
1038	sperm, semen	mùgàzì, mbéèyò yà kígòóshà	ùsèlè	-
62	spider	nsùmà βótàántà	ìtàndàbúú, ìsùmá βùtàántà	178 -bùbì
182	spirit (of dead person)	mìzímù	mízìmù	715 -dùŋgò , 619 -dímò
464	spirit (disembodied)	mìzímù	ípèpò ?, ìtmúdìtìmì	619 -dímò
683	spirit (evil)	mìzímù	ípèpò ?	-
582	spit	kótyà mátyè	kòtyà mátyè	1857 -tú-, 1857a -túíd- 1859 -túíj-
533	spittle	mátyè	mátyè	1690 -(n)té
601	split, crack (vt)	kòtàándòlà	kòdèmúlà	1433 -pánd(òd)-, 1434 -pánd-
951	spoil, blind (vt)	kòpòfúlyà	kòpòkúlyà	1573 -pòkù
649	spoil (a child)	kòsènéxà	kòmúlèxánìlyà	-
998	spoil	kóβìipyà	kònóónà	133 -bííp-, 2119 -yón-
813	spoon	mútìiŋxò	mútìiŋxò	2055 -yìkò
5	spot, speckle	íβàlà	íβàlà	18 -bádà
959a	sprain an ankle	kòtègòlà	kòtèèŋgóxà	1715 -tèŋg- ?
141	spread out (be)	kósàámbáálà	kwìijòlàìijólà	282 -cánj-
527	spread	kwàálà	kwàálà	1916 -yámb-, 1933 -yánj- 1890 -yád-, 1633 -tánd-
908	spread abroad, be; become generally known	kòkùmòóxà	kòkùmóóxà	1263 -kúm-, 1284a -mání-
592	spread, smear on	kóβìlà	kópàxà ?	142 -bídò ?

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
591	spread, scatter (vi)	kúsàmbàálâ	kòsàmbáálà	1653 -támb-
880	spring (of water)	nsìímbò	nsìímbò	407x -cúdò, 338 -cìmb-
965	spring, machine	-	mútàámbò	1661 -támbò
866	spy out	kúpèlèlèlyâ ?	kòsìímbà ?	*ps* 117 -cód- ?
849	squat (on the haunches)	kúsònjòβàlà	kòsònjòβálà	-
991	squeeze oneself up against a wall (e.g. to allow another to pass)	-	kwiihégà	47 -bánd-, 1454 -pát(àn)- ?
914	squeeze out	kòmìnyà	kóxàmà	1313 -mìni-/miny- 995 -kám(òd)-
343	squeeze, milk	kòshèémà	kóxàmà	994 -kám-
102	squirrel	xáwùùndì	ŋxàlà	-
562	stack, pile up	kòlòndíxà	kòlòndíxà	705 -dònd(ìk)-
1029	stand (vi)	kwíímà	kwìímìlílà	2006 -yím-/-yímìdìd
735	star	nsòòndà	njòtà	1791 -tóndùà, *ps* 543 -yó(n)tì 1983 -nyényèdí
390	stare, glare	kòdòòlólà	kòkúúnà	-
202	start off, send away	kówòòchâ	kòwòòchâ	197 -bóók- ?
799	startle, catch unawares	kwòògòhyà	kòdííàà	284 -càŋg-, 1008 -káŋg-
830	startle, jerk	kwòògòhyà	kòdííxà, kwòògòpyà	1008 -káŋg-
618	steal	kwííβà	kwííβà	2020 -yíb-
266	steel	-	chòòmà	-
554	stem (of maize, millet, etc.)	ìβòlòlè/máβòlòlè	ibélègè/màbélègè, mànsáálè	70 -bèdé ?
825	step over	kòtàámbòòŋxànìà	kòdííàà	1051 -kíd-
315	sterile man (or woman)	mùgòómbà	mùgòómbà	894 -gòmbà
541	stick	ŋxómè	ŋxómè	500 -dàŋg- ?
74	stir, mix by stirring	kòkùlùgànìà	kògùlúúŋgà	189 -bódòŋg-
850	stir	kòkùlùgànìà	kòkùlùgànìà	735 -dúg-
78	stir up	-	kògùlùmòlà	286 -càŋg-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
61	stone	ìbwè/màbwè	ìbwè/màbwè	176 -bòè
228	store up, collect	kòkúúŋgànìà	kòkùùŋgánìà	704 -dònd-, 365½ -còd-
154	straight (make)	kòŋgòlòólà	kòŋgòlòòlà	843a -gòdòd-
268	stranger, guest	mùhéénjà	mùhéénjà	805 -gèni
661	stream, current	móóŋgò	lòŋgèlà	941 -jìdà ?
798	strength, power	ŋgùlù	ŋgùlù	909 -gùdù
140	stretch oneself	kwíígòlòólà	kwíígòlòólà	843a -gòdòd-
395	strike, knock	kókòβà, kòxòòntà	kótòlà	1148 -kònt-
982	strike with a spear	kòkímà, kólàsà	kólàsà	375 -còm-, 449 -dác- 1752 -tím-, *ps* 453 -tímò
282	string (n)	úùjì	wééndà, wùùjì	592 -dí
487	strip off (e.g. grains of corn)	kópòlólà	kòpòlólà	1588 -pòd(òd)-
519	strut proudly	kwíígùmààlyâ	kwìlùtùmólà	-
407	stumble	kwííkùúmpà	kòkúúmpà	-
997	stunted (be); be spoilt	kòdùmàálà	kònywèèŋgémélà	1132 -kòm-
948	stutter	kòtàmààntámà	kòtàmààntàmà	1685 -tát- ?, 1447 -pàp- ?
594	suck (the breast)	xwóóŋxà	kwóóŋxà	2135 -yóŋk-
480	suck (vt)	kòmìímà, xwóóŋxà	kòmìímà	1559 -píp-
912	suffer, bear patiently	kòmìgìkílyâ	-	2059 -yím- ?
802	sugar cane	igúβà	igúwà	872 -gòbá
333	sun, light	lyóónsì, wáápè	lyóónsì	955 -jóbá
184	surround	kòpìlímà	kòpìlímà	1514a -pìdòd-?, 1529 -pìndòd ?
438	swallow	kòmílà	kòmìlà	1306 -mìd-
777	swear	kwíílàhà ?	kwílàpìlílà	503 -dàp-
905	sweat	ídòtà	ídòtà	1855 -tù, 2158 -yókì ? 2031 -yícòdì ?
392	sweep up, collect in a heap (rubbish)	kókùùŋgàànìà	kòkwàáŋgólà	1509 -píágìd-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
943	sweep	kòpyàágólà	kòpyàágólà	1509 -píágìd-
517	sweet, pleasant	-nònù	-nònù	1370 -nòn-
51	swell	kóβìímbà	kòβìímbà	144 -bímb-
608	sword (short)	-	igóβìlò, kíshò, nsìímè	-
933	sword	mpááŋgà	ìpááŋgà	1441 -páŋgà
360	tail	múkìlà	múkílà	1053 -kídà
875	take leave of	kòdààhyâ	kòdááyâ	463 -dàg-, 503 -dàp- ?
778	take in (from rain, etc.)	kòsóóhà mbùlà	-	-
565	take, carry	kòsòlà	kòsólà	365½ -còd-, 1806 -tóád-
233	take off (clothes), undress	kólyóólà	kòlyóólà	730 -dúód-, 1915 -yàmb-
530	tangle	kòsàànjà ?-	kòpwéélá màsàlà	1685 -tát-
898	taste (v)	kògémà, kòtòmólà	kògèlyà	797 -gèd(i)-
985	teach, instruct	kóhèèmbéxà	kóligà	500 -dàŋg(ìd)-, 1876 -tú(ú)nd- 1284 -màn(i)- ?
621	tears	míísòlì	míísòlì	368 -códì
412	ten	íkòmì	ikòmi	1208 -kómi
121	termite	mùswà	múswà	392 -cóá
739	testicle	ìtùúnyà/màtùúnyà	íntùlù/màtùlú	155 - bódò, 690 -dódòè ?
1020	that	ìyò	ìyò	2283 -VCVo), 551 -díá
455	thatched roof	ìβáándà	kòcháányà	143 -bímb-, 639 -dòbá ?
767	there	ìpó, òxó	ìpó, òxó	2215 -pà + 551 -díá
54	they	ìwó	ìwó	152 -bó
444	thick, fat	-gínù	-gínù	815 -gìn-
86	thicket *	màsáxà	ìsáxà/màsáxà	260 -càká
854	thicket	kàsáxà	ìsáxà, kàsáxà	260 -càká
619	thief	mwìiβì	mwìiβì	2025 -yíbi
23	thigh (of human)	ìtàáŋgò	ìtàáŋgò	79 -bèdò
22	thigh (of animal)	kìtàámbò	kìtàámbò	79 -bèdò
559	thing	kìíntò	kìíntò	1799 -ntù

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
987	think, imagine	kwíígànìxà	kòsiímàŋkàlà, kòlìlìŋkàlà	772 -gàn-
651	thirst	nyòótà	nyòótà	2137 -(n)yótà
740	thorn	lííyà/mìíŋhwà	lííyá	902[1/2] -ŋgùà/-yìŋgùà *ps* 399 -póá
689	threaten	kòtìishâ, kóxàáŋgà	kòtìishâ ?	2110 -yógòp-, 1008 -káŋg- 1741 -tíín-
532	three	jìtàtù	jítàtù	1689 -tátò
115	thrust into	kòtímà	kòtìmà	375 -còm-
420	tick (cattle or dog)	ígòbà/mágòbà	kúpè ?	1236 -kópà
1034	tie (fasten) (vt)	kótùùŋgà	kòtùùŋgà	1877 -túŋg-
258	tie up	kótùùŋgà	kòtùùŋgà	1877 -túŋg-, 171 -bóp-
978	tingle with excitement	kwíígìlíímbòlílà	kòtètèmà	-
119	tip, point	nsòòŋgè	kó nsóóŋgè	387 -còŋgè
741	tobacco	nsúúŋxò	ítòòmbà	1870 -tù(ù)mb- + 1729 -tí ?
146	today	léélò	lèèlò	518 -dèèdó
742	toe	lyàálà	lwàálà	*ps* 360 -nò ?
445	tomato	nyáányà	nyàànyà	-
105	tomcat (half-wild)	kìímbólò	kìímbólò	-
743	tomorrow	ìgòlò	ìgòlò	841 -gòdò
166	tongue	lólìmì/ndìmì	lòlímì	572y -dímì
120	tooth (canine), tooth filed to a point	-	nsòòŋgà mbwà	387 -còŋgè
267	tooth	líínò/míínò	líínò/míínò	2073 -yínò
306	top, peak	kò cháányà	pà cháányà	881 -gòdò
293	tortoise	ŋkùlù	ìkùlù	1260 -kúdù
277	town	ìhàlà	ŋxàáì	818 -gí, 1020 -kááyà
378	tramp of feet	ŋkìíndò	lókìíndò, íŋkìíndò	1085 -kí(ì)ndò
270	travel	kòyà	kòwóóxà	807 -gènd-
540	tree	mútì	ìpíkì	1729 -tí

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
538	tremble, shake (vi)	kòtètèmà	kòtètémà	1726 -tètɪ̀m-
566	trickle away	kósòlólà	kòsípà, kwiitɪ̀kà	406 -códò
401	trunk (of elephant)	múxònò gwá njógù	múxònò, ísááxò	
604	try	kòɡèmà	kòɡèmà	797 -ɡèd(i)
605	tsetse-fly	kàɡèèmbè	ndòlóbò ?	-
938	turn upside down, turn over	kòpɪ̀ɪ̀ndòlà	kòɡàlólà	*ps* 202 -ɡàdòd- 1529a -pɪ̀ndòd-
174	turn round	kòpilimyà	kòpìlimyà	1514a -pɪ̀dòd-, 1529 -pɪ̀ndòd
711	tusk, elephant's (middle size) *	-	lìinò lyá njógù	1476 -pémbè ?, 20 -yínò
452	twin	ípàsà/màpàsà	ipàsà/mápàsà	1407 -pácà
185	twist roll, spin with fingers	kòpèlégà	kòsìβà	1583 -pót-
483	twist, esp strands	kópòtà	kópòtà	1583 -pót-
752	two	jìβílɪ̀	jìβílɪ̀	113 -bìdí
18	udder	kíβèélè, nyòòŋkélò	kíβéélè	72 -béédè
945	uncover, reveal	kókòndòkólà	kòkùndòkólà	1268b -kúnòd-, 1269a -kúndòd
551	unripe, half grown	itɪ̀índɪ̀	íβìsì, itɪ̀índɪ̀	102 -bícì
994	unripe, uncooked	mbìsì	íβìsì	102 -bícì
311	up, above	kò cháányà, kwiigólyà	kò cháányà	883 -ɡòdò
614	upright	wɪ̀ímà	kwɪ́ímìlílà	2059 -yím-
446	urinate/defecate	kòtùùndà, kònià	kòtùùndà, kònià	430 -cùb-, 1255 -nì- 1839 -tònd-
745	urine	màtòónd ɪ̀	màtóónd ɪ̀	390 -cò, 1123 -kòjó
569	use	kótòmílà	kòtòmílà	1831 -tóm-
307	utmost, highest point	kò cháányà	kò cháányà	883 -ɡòdò
904	vapour, gas	mútùtù	mùtútù	1855 -tù, *ps* 415 -púdì
380	vein	mùsípà ?	lòpótà lwà cháájì	1583 -pót-, 1087 -kìpà
276	village	ígòòŋgòlì	ìhàlà	818 -ɡí
692	virgin (bride), girl	múhàlà, mwàánikè	múhàlà	-
327	vision	ndòòtì	ndòòtì	*ps* 186 -dóótì

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
330	voice, (thunder)	mùlí	-	474 -dáká, 954 -jóì
224	vomit	kólòxà	kòdííxà	695 -dúk-
524	walk (take a)	kògèéndà	kògééndà	807 -gènd-, 820 -gì-
269a	walk	kòyà	kòyà	806 -gènd-
847	wall	ígèlèlè	lógèlèlè	795 -gèd-, 1001 -kànd-
983	want, need, wish	kòpòógà	kòpóógà	256 -càk-, 1974 -yènd-
507	war	wòlógò	òlógò	184 -bód-, 151 -bìtá, 1147 -kóndò
790	wart-hog	ŋgìlì	ŋgìlì	814 -gìdì
860	wash oneself (after evacuating)	kwíípyàgólà, kwíishèèntà	kwíísìíŋgà	1539 -piágìd-, 2107 -yò(ò)g-
127	wash (hands)	kóxàláβà	kòsìíŋgà	*ps* 303 -kóc-, , 2107 -yó(ó)g- 1186 -kóc-
128	wash (clothes)	kókàánjà	kòxàánjà	1001 -kànd-
129	wash, take a bath	kwóógà	kwòògà	2107 -yó(ó)g-
322	water	mííjì	mííjì	937 -jí
959	wave, let off a trap, remove a spell	kòlògòólà	kòtègólà	1698 -tég-, *ps* 276 -kàkòd- <- kàg- (990)
1017	we	ìiswè	swèèswê	395 -cóé/-cúé, 2099 -yítúé
1010	weak	-	-	528 -dèm
881	wean a child, give leave, send away	kòpèlyà	kòlèchà	526 -dèk-
234	wear, dress	kòlyàálà	kòlyáálà	726 -dúád-, 1915 -yàmb-
501	weave, knit	kófùmà ?	kósùmà	1861 -túm-
1015	weight, rhythm	βòtíímbò	βòtìimbò	631 -dítò, 1519 -pìm-
210	well	kísìmà ?	ísimà	1753 -tímá, 353 -címá 1999 -yíjì
56	wet (get)	kòsápà	kósàpà	161 -bòmb-, 637 -dòb-
919	what?	kíí	kìntò kí	1046 -kí, 1926 -yàni
469	which?	kìlíhé	kìntò kí	1498 -pí

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
192	whistling	mùlòlì	mùlòlì	642 -dòòdì, 687 -dódí
175	white man	mùjúúŋgù	mùzúúŋgù, mwèèlù, wáápè	599 -díúŋgò
610	white	yèèlù, yàápè	mwèèlù	1966 -yédò
918	who?	ánàànù	ànáánì	1343 -náni
28	wicked	-bì	ìbì	97 -bí
339	wife	múkɪ̀ímà	múkɪ̀ímà	1022 -ké, 986 -kádi
187	wind up (thread)	kògòòndà	kòpìlìmà	625 -díŋg-
746	wind	mpèpò, ípùútà	mpèpò	1493 -pépò
937	winnow	kópèétà	kòpéétà	1955 -yèd-, 1496 -pét- 419 -còŋg(òd)-
112	wipe	kópyàágólà	kòfùtà ?	1598 -pókòt-, 1539 -píágìd- 1509.5 -pfáŋg-
88	wire (brass)	-	-	268 -cámbò
194	witchcraft	βòlógi	βòlógì	646 -dògì, 647 -dògò
279a	withhold from	kwíímà	kwíímà	2058 -yím-
279	withhold from, abstain	kwíínyíímà ?	kwíínyíímà ?	2058 -yím-
338	woman	mùkɪ̀ímà/βàkɪ̀ímà	múkɪ̀ímà	970 -ká, 986 -kádì, 1022 -ké
747	womb	ndà yà βòlèlì	ndà yà βòlèlì	443 -dà
812	word	mpòlà	mpòlà	771 -gàmbò
772	work as a mason	kójèéŋgà	kòjèéŋgà	199 -bómb-, 935 -jèŋg-
167	work (n)	*mùlímò/mìlímò*	*mùlímò*	574 -dìmò
81	wrap up	kògòóndà	kòkònjàníà	625 -díŋg-
344	wring (clothes)	kómínyà	kòmìnyà	995 -kám-
773	yawn	kwááyólà	kwááyólà	1953 -yáyòd-
593	year	mwááxà	mwááxà	1904 -yákà
750	yesterday	ìgólò	ìgòlò	841 -gòdò
15	you (sing.)	βèèβè	wèèwê	64 -bé
1018	you (pl.)	iimwè	nywèènywê	1325 -múé, *ps* 366 -núé
715	young man	múgòóshà, mùlùmyáánà	mùgwìshà	697 -dúmè + 1922 -yánà

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
637	your(s) (pl. 2nd) person)	yiíŋwè	yáányù	2074 -yínó
693	youth	mùlùmyáánà, mwáánikè	mùlùmyáánà	697 -dómè + 1922 -yánà 1922 -yánà + 986 -kádì ?
292	zebra	-	nsèèŋgélè	-

Appendix 2. Phonological inventories of Zone F

Appendix 2a. Vowels

Morpheme ☞ Language ⇓	i	ii	ɪ	ɪɪ	e	ee	a	aa	o	oo	ʊ	ʊʊ	u	uu
SiSuumbwa	+	+	-	-	+	+	+	+	+	+	-	-	+	+
KɪSukuma	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KɪNyamweezi	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KiBende	+	+	-	-	+	+	+	+	+	+	-	-	+	+
KɪnɪLaamba	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KɪRɪmi	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KɪKɪɪmbʊ	+	+	+	+	+	+	+	+	+	+	+	+	+	+
IcɪWʊʊŋgʊ	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KiiRaŋgi	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KeeMbuwe	+	+	-	-	+	+	+	+	+	+	-	-	+	+

Appendix 2b. Stops and pre-nasalized stops

Morpheme ⇨ Language ⇩	p	b	mp	mb	t	d	nt	nd	c	j	ɲc	ɲj	k	g	ŋk	ŋg
SiSuumbwa	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KɪSukuma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KɪNyamweezi	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KiBende	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KɪnɪLaamba	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KɪRɪmi	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KɪKɪɪmbʊ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
lcɪWʊʊŋgʊ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KiiRaŋgi	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KeeMbuwe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Appendix 2c. Fricatives and pre-nasalized fricatives

Morpheme ⇒ Language ⇓	ɸ	β	f	v	mf	mv	s	z	ns	nz	ʃ	x	ɣ	ŋx	ŋɣ	h
SiSuumbwa	-	?[1]	+	+	+	+	+	+	+	+	+	-	-	-	-	+
KɪSukuma	+[2]	+	+	+	+	+	+	+	+	+	+	-	-	-	-	+
KɪNyamweezi	-	+	+	+	+	+	+	+	+	+	+	-	-	-	-	+
KiBende	-	?	+	+	+	+	+	-	+	-	+	-	?	-	-	+
KɪnɪLaamba	-	-	+	-	+	-	+	+	+	+	+	-	-	-	-	+
KɪRɪmi	+	+	+	+	+	+	+	+	+	+	+	?	?	?	?	+
KɪKɪɪmbʊ	-	-	+	+	+	+	+	+	+	+	+	?	-	?	-	+
IcɪWʊʊŋgʊ	-	-	+	+	+	+	+	+	+	+	+	-	-	-	-	+
KiiRaŋgi	-	-	+	+	+	+	+	+	+	+	+	-	-	-	-	+
KeeMbuwe	-	-	+	+	+	+	+	+	+	+	+	-	-	-	-	+

[1] The phonological status of these phonemes is doubtful, since they are either context-sensitive, as in KɪKɪɪmbʊ (x-k), and sometimes they can be in free variation with homorganic stops, i.e., b~β, x~k, ɣ-g; or they are likely to be loans, as in the case of KɪRɪmi, where the likely donor might be Southern Cushitic Iraqw which has the pharyngeal /x/ and /ɣ/ opposition.

[2] Only two words in JinaKɪɪya could be readily found, ŋwɪɸwa 'nephew/niece' and maɸwa 'rope-like cut and sun-dried slices of pumpkin meat used as a relish during the season when there are no fresh vegetables'.

All Zone F languages have fricatives, although only SiSuumbwa and KiBende have consistent BS. In the other languages BS is questionable because of being irregular, suggesting any BS-like behaviour is from borrowed items. Three explanations are possible (a) acquiring them through borrowing words with BS (b) from palatalization as a natural process before high front vowels, as in KISukuma (c) in form of an open-ended question: how valid is the assumption that Proto Bantu did not have any fricatives?

Appendix 2d. Nasals, liquids, semi-vowels and voiceless counterparts, where relevant

Morpheme ⇒ Language ⇓	m̥	m	n̥	n	ɲ̥	ɲ	ŋ̊	ŋ	l	R (r̥)	r	w	y
SiSuumbwa	-	+	-	+	-	+	-	+	+	-	-	+	+
KISukuma	+	+	+	+	+	+	+	+	+	-	-	+	+
KINyamweezi	+	+	+	+	+[3]	+	+	+	+	-	-	+	+
KiBende	-	+	-	+	-	+	-	+	+	-	-	+	+
KInILaamba	-	+	-	+	-	-	-	+	+	-	-	+	+
KIRImi	-	+	-	+	-	+	-	+	+	+	+	+	+
KIKIImbU	-	+	-	+	-	+	-	+	+	-	-	+	+
IcIWUUŋgU	-	+	-	+	-	+	-	+	+	-	-	+	+
KiiRaŋgi	-	+	-	+	-	+	-	+	+	-	+	+	+

[3] While KIDakama has voiceless nasals, the other varieties traditionally grouped in KINyamweezi (KIKonooŋgo, KINyanyeembe and SiGalagaanza only pre-nasalize those vowels.

Morpheme ⇒ Language ⇓	m̥	m	n̥	n	ɲ̊	ɲ	ŋ̊	ŋ	l	R (r̥)	r	w	y
KeeMbuwe	-	+	-	+	-	+	-	+	+	-	+	+	+

The nasal, liquid and semi-vowel phoneme picture is relatively regular like the preceding phonemes save for three group, namely, (a) KISukuma and KIDakama for the voiceless nasals; (b) KIRImi with the voiceless flap /R/ or /r̥/; (c) KIRImi, KiiRaŋgi and KeeMbuwe for the voiced flap /r/ (which is a trill in KiiRaŋgi and KeeMbuwe). The presence of /r/ in KiiRaŋgi and KeeMbuwe corroborates the earlier observations that they share some common linguistic history as well as geographical proximity.

Appendix 3 Dahl's Law in Zone F

Lexeme ↔ Language .	*-tatɔ 'three'	*-tapa 'draw water'	*-yikɔt- 'satiated (be)'	*-kuta 'oil'	*-kupa 'bone'	*-poku 'blind person'
SiSiloombo	isatu	kutaha	kwiikuta	mafuta	(igufwa)	muhofu
SiYoombe						
KiLooŋgo			-	(mazuta)		
KɪmunaSukuma	idatɔ	kɔdaha	kwiigɔta	maguta	liguha	moku
GɪnaNtuzu		gɔdaha	gugɔta		iguha	
JinaKɪɪya	ɪdatɔ		gwɪgɔta		ɪguha	mboku
KɪDakama	idatɔ	kɔdaha	kwiigɔta	maguta	iguha	(muhofu)
KiNyanyeembe			kwiikɔta	mafuta		mpofu
KiKonooŋgo	idatɔ itatɔ			maguta		muhofu
SiGalagaanza	itatɔ			mafuta	ifupa	mpofu
KiBende	itatɔ	kutaha	kwiikuta	mafuta	ifuha	muhofu
KɪnaUshoola	katatɔ	kɔtepeela	kɔkikɔta	makuta	kupa	mupoku
KɪnɪLaamba			kɔkikyɔta		kyupa	
KɪnIhaanzu	itaatɔ		kikɔta		ikupa	mpoku
GɪRwana	iRaRɔ	ɔRafa	kikɔRa	makuRa	ikufa	mufoku
Giahi		oRafa	ixɔRa	maxuRa	iɣufa	mɔɸoku
ɣɪnyaMunyiŋanyi	taatu	ɔtafa	kikɔRa	makuta	ɪkuɸa	mɔpoku
KɪKɪɪmbɔ N	jitatu	kɔtapa	kwiikɔta	makuta	ikupa	mpofu
KɪKɪɪmbɔ S						
ɪcɪWɔɔŋgɔ	zɪtatɔ	kɔtepa	kwiikɔta	mafuuta	ɪfupa	ɔcɪpofu
KilRaŋgi	itatɔ	kɔtaha	kwiikɔta	makuta	ikufa	muhoku
KeeMbuwe	saato	otafa	oikota	makuta	kufa	-

Appendix 3. Dahl's in Zone F

Lexeme ↔ Language .	*-pute ' abcess, boil'	*-tɔk- 'abuse, insult'	*-ɣɪtik- 'answer a call'	*-pik- 'arrive'	*-tooke 'banana fruit'
SiSiloombo	ihute	kɔtɔka	-	kuhika	itooke
SiYoombe		kutuka	-		
KiLoonɡo		-	-		
KɪmunaSukuma	iβute	kɔdɔkɪla	kwiidɪka	kɔʃika	ndooke
GɪnaNtuzu	ɪβute	gɔdɔkɪla	gɔdɪka	gɔsika	ndooke
JinaKɪɪya	iβute		gwɪdɪka	gɔʃiga	ɪdooke
KɪDakama	-	kɔdɔkana	gwiidɪka	kɔʃika	idooke
KiNyanyeembe	-	kɔtɔkɪla	-	kɔfika	
KiKonoonɡo	ipute		-	kɔsika	
SiGalagaanza	-	kɔtɔkɪzya	-	kɔfika	
KiBende	ihuute	kutuka	-	kufika	-
KɪnaUshoola	-	kɔtɔkana	kɔyɪtɪka	kɔpika	-
KɪnɪLaamba	-	kɔtɔkɪla	kɔyɪɪtɪka		-
KɪnIhaanzu	ipute	kɔtɔkɪlana	kiitɪka		-
GɪRwana	-	ɔRɔkana	iRɪka	-	-
Giahi	-	tɔxana		-	-
ɣɪnyaMunyiŋanyi	ipuRe	ɔtɔkana	gitɪka	ofika	-
KɪKɪɪmbɔ N	ipute	kɔtɔxana	kwiitɪxa	kɔpixa	idooke
KɪKɪɪmbɔ S					
ɪcɪWɔɔŋgɔ	-	kɔtɔkana	ɔkwɪtɪkɪla	kɔsɔka	-
KiIRaŋgi	-	kɔtɔkɪra	kwɪɪtɪka	kɔfika	-
KeeMbuwe	-	otokana	weiteka	ofika	-

Appendix 3. Dahl's in Zone F

Lexeme ↔ Language .	*-kaate 'bread'	*-tako 'buttock'	*-cɒpa 'calabash'	*-capo 'calabash'	*-pepo 'cold'	*-teek- 'cook'
SiSiloombo	ŋkaate	-	-	sisyaabo	mpeho	kuteeka
SiYoombe	mukaate	itako	-	sisaabo		
KiLooŋgo		-	-	cisaaβo	-	
KɪmunaSukuma	ŋgaatɪ	idako	-	-	mbeho	-
GɪnaNtuzu			-	gɪsaaβo		-
JinaKɪɪya		ɪdako	sɒha	jisaaβo		-
KɪDakama	mugaate	idako	nsɒha	-	mbeho	-
KiNyanyeembe	mukaate		-	-		kɒteeka
KiKonooŋgo	mugaate		-	-		
SiGalagaanza	mukaate	itako	-	-		
KiBende	mukaate	itako	-	-	mpeho	kuteeka
KɪnaUshoola	mukaate	tako	-	kɪsaao	mpepo	-
KɪnɪLaamba		tyako	-	-		-
KɪnIhaanzu		-	-	-		-
GɪRwana	mukaate	iRaaxo	ŋɔɔfa	-	-	-
Giahi	mukate	iRaɣo		-	mpeɸo	uRexa
ɣɪnyaMunyiŋanyi	muxate	ɪRako	ŋɔɔɸa	-	mpeeɸo	-
KɪKɪɪmbɒ N	mukaate	itaxo	-	-	mpepo	kɒteexa
KɪKɪɪmbɒ S	muxaate		-	-		
ɪcɪWɒɒŋgɒ	ɒmukaate	itako	-	-	ɪmbepo	kɒteeka
KilRaŋgi	mukaate	taako	kɪsɒwa	-	mpeho	-
KeeMbuwe	mokate	tako	-	-	mpefo	otereka

Appendix 3. Dahl's in Zone F

Lexeme ⇨ Language ↓	*-koko 'crust'	*-kɪti 'darkness'	*-tikɔ 'day'	*-cikɔ 'day'	*-keep- 'diminish, grow less'	*-kɔtɔ 'ear'
SiSiloombo	ŋkokotwa	-	lɔsiku	-	-	-
SiYoombe		giiti		-	-	-
KiLooŋgo	eeŋkogoto	-	-	-	kukeha	-
KɪmunaSukuma	βɔgokwa	giiti	lɔʃikɔ	-	kɔgeeha	gɔtɔ
GɪnaNtuzu	lɔgɔkɔlɔ		lɔsikɔ	-	gɔgeeha	
JinaKɪɪya			lɔʃigɔ	-		
KɪDakama	-	giiti	lɔʃikɔ	-	-	-
KiNyanyeembe	ŋkokoto		lɔsɪkɔ	-	-	-
KiKonooŋgo	makokolo		lɔsiku	-	-	-
SiGalagaanza	-	-	lɔsikɔ	-	-	-
KiBende	-	-	-	-	-	-
KɪnaUshoola	ŋkoko	-	-	-	kɔkeepa	-
KɪnɪLaamba	kyoko	-	-	-		-
KɪnIhaanzu	lɔkoko	kiti	-	lɔhikɔ	-	-
GɪRwana	maxoxo	kiiRi	iRikɔ	-	keefa	-
Giahi			iʃiixɔ	-	oxefa	-
ɣɪnyaMunyiŋanyi	ɪkoko	kiiti	iRikɔ	-	keepa	-
KɪKɪɪmbɔ N	βɔxoxo	kiiti	-	lɔsikɔ	-	-
KɪKɪɪmbɔ S	βɔŋkoko		-		-	-
ɪcɪWɔɔŋgɔ	amakoko	-	-	lɔsikɔ	kɔcepa	-
KilRaŋgi	ukoko	-	-	siku	-	kɔtɔ
KeeMbuwe	lokooko	-	-	nsiko	okeefa	kɔtɔ

Appendix 3. Dahl's in Zone F

Lexeme ☞ Language .	*–kokɒda 'elbow'	*-kope 'eyelash'	*-kɔɔkɔ 'grandfather'	*-koopi 'hand (flat of)'	*-kata 'headpad'
SiSiloombo	ikookola	ŋkohe	gɔɔkɔ	ikoofi	ŋkata
SiYoombe	lɒkookoola		guuku		
KiLooŋgo		eŋkohe			eŋgata
KɪmunaSukuma	igookoola	ŋgohe	gɔɔkɔ	-	ŋgata
GɪnaNtuzu				-	
JinaKɪɪya				-	
KɪDakama	-	ŋgohe	gɔɔkɔ	-	ŋgata
KiNyanyeembe	-	ŋgohe		ikofi	
KiKonooŋgo	kakokoola		guuku	-	ŋkata
SiGalagaanza	kakooŋkola			ikoofi	ŋgata
KiBende	-	ŋkohe	kuuku	-	ŋkata
KɪnaUshoola	kɪŋkokoola	-	kɔɔkɔ	koopi	ŋkata
KɪnɪLaamba	-	-		kyoopi	
KɪnIhaanzu	kɪŋkokoola	ŋkopi	-	ɪkopi	
GɪRwana	ixoxoa	-	kɒkɔ	-	ŋkaRa
Giahi	gɪhohoa	ŋkofyo	xɔxɔ	ixofi	ŋxaRa
ɣɪnyaMunyiŋanyi	gɪkokoa	ɔkoɸe	kɔɔkɔ	ikoɸi	ŋkaRa
KɪKɪɪmbɔ N	kiŋxoxoola	ŋxope	kɔɔkɔ	ixoofi	ŋxata
KɪKɪɪmbɔ S	kixoxoola	-		-	ŋkata
ɪcɪWɔɔŋgɔ	-	-	-	-	ɪŋgata
KiIRaŋgi	kikokoola	-	-	ikoofi	ŋkata
KeeMbuwe	kɪkokolo	-	-	koofi	ŋkata

Appendix 3. Dahl's in Zone F

Lexeme ☞ Language ↓	*-koko 'hen'	*-kɔkɔ 'hen'	*-pic- 'hide'	*-piti 'hyena'	*-pa/mɔ-katɪ 'in the middle of'	*-cek- 'laugh'
SiSiloombo	ŋkoko	-	kubisa	mfisi	hakati	kuseka
SiYoombe		-	kuβisa		hakatɪ	
KiLooŋgo	eeŋkoko	-	-	empisi	hagati	
KɪmunaSukuma	ŋgoko	-	kɔβisa	mbiti	hagatɪ	kɔseka
GɪnaNtuzu		-	gɔβisa			gɔseka
JinaKɪɪya		-				gɔsega
KɪDakama	ŋgoko	-	kɔβisa	mbiti	hagatɪ	kɔseka
KiNyanyeembe	ŋkoko	-			hakatɪ	
KiKonooŋgo		-			hagatɪ	
SiGalagaanza		-		mfisi	hakatɪ	
KiBende	iŋkoko	-	kɔfisa	-	hakatɪ	kɔseka
KɪnaUshoola	-	ŋkɔkɔ	kɔpisa	mpiti	pakatɪ	kɔʃeeka
KɪnɪLaamba				-		kɔseka
KɪnIhaanzu	-		kɔpiha	mpiti		kɔheka
GɪRwana	-	ŋkɔkɔ	fiiha	mpiRi	muxaRɪ	ɔheka
Giahi	-	ŋxɔkɔ	ɔfiha	mpiiRi		
ɣɪnyaMunyiŋanyi	-	ŋkɔkɔ	ɔbiha	mpiti		
KɪKɪɪmbɔ N	-	ŋkɔkɔ	kɔβisa	mpiti	paxatɪ	kɔsexa
KɪKɪɪmbɔ S	-		-			
ɪcɪWɔɔŋgɔ	-	ŋgɔkɔ	kɔpisa	-	pakasi	kɔseka
KilRaŋgi	-	ŋkɔkɔ	kɔvisa	mpici	katɪ	kɔseka
KeeMbuwe	-	ŋkoko	visa	mpiti	katɪ	oseka

Appendix 3. Dahl's in Zone F

Lexeme ↔ Language ↓	*-pʊʊp- 'light (adj)'	*-bʊʊpʊ 'lung(s)'	*-tope 'mud'	*-tikʊ 'night'	*-pɪt- 'pass'	*-pantʊ 'place (n)'
SiSiloombo	-puupe	-	-	-	kuhita	haantu
SiYoombe	-pʊʊpe	-	-	-		
KiLooŋgo	-puupe	-	-	-	-	
KɪmunaSukuma	-bʊʊpu	mabʊʊpʊ	-	βʊjikʊ	kʊβɪta	haaŋʊ
GɪnaNtuzu		-	-	βʊzikʊ	gʊβɪta	
JinaKɪɪya		mabʊʊpʊ	-	βʊjikʊ		
KɪDakama	-bʊʊhu	mabʊʊpʊ	-	βʊzikʊ	kʊβɪta	haaŋʊ
KiNyanyeembe		-	matope	ʊzikʊ		haano
KiKonooŋgo	-bʊʊhe	mapʊʊpʊ	-	βʊzikʊ		haantʊ
SiGalagaanza			-	βʊfuku		hantʊ
KiBende	-	-	matope	bufuku	kuhita	haantu
KɪnaUshoola	-	mapʊʊpʊ	-	ʊtikʊ	-	-
KɪnɪLaamba	-		-		-	-
KɪnIhaanzu	-	mapʊpʊ	-		kʊhɪta	-
GɪRwana	-fʊfu	mafʊʊfʊ	maRofe	ʊRixʊ	-	-
Giahi	-	mafʊfʊ	maRoɸe		-	faantu
ɣɪnyaMunyiŋanyi	-pʊʊfu	maɸʊɸʊ	itofe		-	-
KɪKɪɪmbʊ N	-bʊʊhu	mapʊʊpʊ	-	βʊtikʊ	-	paantʊ
KɪKɪɪmbʊ S	-		ɪntope		-	
ɪcɪWʊʊŋgʊ	ɪmbʊʊpu	amapʊʊpʊ	-	ʊsikʊ	kʊpɪɪta	apaandʊ
KilRaŋgi	-	mahuuhu	itohe	ʊcikʊ	-	haantʊ
KeeMbuwe	-	mafʊʊfʊ	matofe	otiku	-	faanto

Appendix 3. Dahl's in Zone F

Lexeme ↦ Language ↓	*-cato/catɔ 'python'	*-tikɔ 'rainy season'	*-kocɔe 'rat'	*-kec- 'reap'	*-pokɪd- 'receive'	*-tete 'reed'
SiSiloombo	nsato	-	ŋkoso	-	kɔpokeela	-
SiYoombe		-		kukesa	-	matete
KiLooŋgo	eensato	-	-	kugesa	-	madete
KɪmunaSukuma	sato	kidikɔ	ŋgoso	kɔgesa	-	madete
GɪnaNtuzu		gidikɔ	-	gɔgesa	gɔbokeela	
JinaKɪɪya	sado	jidikɔ	ŋgoso			
KɪDakama	isato	kidikɔ	ŋgoso	-	kɔbokeela	madete
KiNyanyeembe	sato		ŋkoso	-	kɔpokeela	madete
KiKonooŋgo	nsato			-		-
SiGalagaanza		sidikɔ		-		matete
KiBende	nsato	-	ikoso	-	kɔpokeela	matete
KɪnaUshoola	nsatɔ	kitikɔ	ŋkoso	-	-	matete
KɪnɪLaamba	nsato	kɪtikɔ	-	-	kɔpokeela	-
KɪnIhaanzu		kitikɔ	-	-		matete
GɪRwana	-	-	-	-	-	matete
Giahi	nsaaRo	giRixɔ	-	-	ɔfokea	-
ɣɪnyaMunyiŋanyi	saRu	-	ŋkoho	-	ɔɸokea	-
KɪKɪɪmbɔ N	nsato	kitikɔ	ŋkoso	-	kɔpokeela	matete
KɪKɪɪmbɔ S			-	-	kɔpokela	
ɪcɪWɔɔŋgɔ	ɪsatu	cɪsikɔ	-	-	kɔpokela	matete
KilRaŋgi	saatu	kicikɔ	-	-	kɔhokera	matete
KeeMbuwe	nsato	ketikɔ	-	-	isokera?	vitete

Appendix 3. Dahl's in Zone F

Lexeme → Language ↓	*-kuc- 'rub'	*-pepo 'shadow, shade'	*-tetɪm- 'shiver'	*-kupɪ 'short'
SiSiloombo	kukuusa	-	-	nɪɪhɪ?
SiYoombe		-	-	niihɪ?
KiLooŋgo		muβeho	-	-gufu
KɪmunaSukuma	-	mbeho	-	-guhɪ
GɪnaNtuzu	-		gɑdeterna	
JinaKɪɪya	gɑguusa			
KɪDakama	-	-	kɑdeterna	-guhɪ
KiNyanyeembe	-	-	kɑteterna	
KiKonooŋgo	-	-		
SiGalagaanza	-	-		
KiBende	-	-	kɑteterna	-
KɪnaUshoola	-	-	-	-kupɪ
KɪnɪLaamba	-	-	-	
KɪnIhaanzu	-	-	-	
GɪRwana	-	mpefo	-	-kufɪ
Giahi	-	mpeɸo	-	
ɣɪnyaMunyiŋanyi	-		-	-kupɪ
KɪKɪɪmbɑ N	-	-	kɑteterna	-kupɪ
KɪKɪɪmbɑ S	-	-		
ɪcɪWɑɑŋgɑ	kɑkuusa	paampepo	kɑteterna	inipɪ
KilRaŋgi	-	mpeho	kɑteterna	-kufi
KeeMbuwe	-	mofefo	kɑteterna	-kufe

Appendix 3. Dahl's in Zone F

Lexeme ↔ Language .	*–poku 'spoil, blind'	*-yiko 'spoon'	*-caka 'thicket, bush'
SiSiloombo	kuhofuzya	mwiiŋko	-
SiYoombe	kuhofusya		-
KiLooŋgo	kuhofula		isaka
KɪmunaSukuma	kʊβokuja	ndɪɪn̩o	kasaka
GɪnaNtuzu	gʊbokuja	ndɪɪŋho	isaka
JinaKɪɪya		ndɪɪn̩o	ɪsaga
KɪDakama	kʊhofuʃa	mudɪɪn̩o	isaka
KiNyanyeembe	kʊpofuzya	mutiiŋko	
KiKonooŋgo	kʊhofusya		kasaka
SiGalagaanza	kʊpofula	mutɪɪŋko	-
KiBende	kupofusya	mwiiko	-
KɪnaUshoola	kʊpokulya	mutɪɪŋko	ʃaka
KɪnɪLaamba		kitɪɪŋko	
KɪnIhaanzu		mutɪɪŋko	ihaka
GɪRwana	ɸokua	gɪReŋko	-
Giahi	ɸoxua		gahaka
ɣɪnyaMunyiŋanyi	ʊhokuya	gɪRɪŋko	
KɪKɪɪmbʊ N	kʊpofulya	mutiiŋko	kasaxa
KɪKɪɪmbʊ S	kʊpokulya	mutɪɪŋxo	
ɪcɪWʊʊŋgʊ	kʊpofuʃa	ʊntɪɪŋgo	isaka
KiIRaŋgi	kʊhukurya	mutɪko	isaka
KeeMbuwe	-	mutiiko	-

Appendix 3. Dahl's in Zone F

Lexeme ⇨ Language ↓	*-kʊpa 'tick'	*-paca 'twin'	*-pot- 'twist strands'	*-pepo 'wind'	*-pet- 'winnow'
SiSiloombo	ŋkuha	mahasa	kupota	-	-
SiYoombe				-	-
KiLooŋgo	-			-	-
KɪmunaSukuma	-	maβasa	-	-	-
GɪnaNtuzu	-		-	-	-
JinaKɪɪya	-		gʊbota	-	gʊbeeta
KɪDakama	-	maβasa	-	-	kʊbeeta
KiNyanyeembe	-	mapasa	-	-	kʊpeeta
KiKonooŋgo	-	maβasa	-	mbeho	
SiGalagaanza	lɪŋkʊpa	mapasa	-		
KiBende	-	mahasa	-	-	kʊpeepeeta
KɪnaUshoola	ŋkʊpa	-	kʊpotya	-	kʊpeeta
KɪnɪLaamba		-	kʊpota	-	
KɪnIhaanzu		-	kʊpotya	-	
GɪRwana	ŋkʊfa	mafaha	-	ufefo	fefeRa
Giahi	ŋxʊfa		-	ʊfefo	-
ɣɪnyaMunyiŋanyi	ŋkʊɸa	maɸaha	-	mpeeɸo	-
KɪKɪɪmbʊ N	igʊba	mapasa	kʊpota	mpepo	kʊpeeta
KɪKɪɪmbʊ S	kupe?				
ɪcɪWʊʊŋgʊ	ɪɪŋgʊpe	embasa	-	-	kʊpeeta
KilRaŋgi	ŋkʊfa	maasa	kʊfota	mpeho	-
KeeMbuwe	ŋkoofa	mabasa	fota	mpefo	-

Appendix 4 Lexicostatistics: 100 word-list of 28 language varieties.

Appendix 4. DJ66, F23, EJ22e, F10

No	*Language variety ➨ PB and Gloss ⇓*	*S/N*	iGiHa (DJ66)	SiSùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	RuHyoza (EJ22e)	KiTòòŋgwè KiBèndè
133	abdomen, stomach *-da	058	inda	ndà	ndà	ìùβúúndà	eibunda	ìindà
926	all *-(n)ce, -yona	010	-otse	-òónà	-óónà	-óónà	-oona	-òónsè
55	arm, hand *-kono, -boko	057	ukuβoko	kùβòkó	kòβókó	mùkónò	omukono	kùβókó
337	ashes *-bu	071	umunyota	màvú	ivú/màvú	izù/màzù	eijwi	ifúúndú/ màfúúndú
297	back (n)*-goŋgo	060	umugoŋgo	mùgòòŋgò	mùgòóŋgò	mùgòòŋgò	omugoŋgo	múyòòŋgò
27	bad *-bɪ	021	-βi	ibí	iβí	-íβì	-bi	ibí
1022	bark *-koba	036	ikigula	igúlà	igúlà	ìgúlà, iβááŋgwà	kishushu	-
811	bird *-yoni, -nyoni, -dege	029	inyoni	nònì	nònì	nyònyì	ekinyonyi	inyònyì, kànyònyì
125	bite *-dʊm-	085	-dya	kùlùmá	kùlùmá	kùlùmà	kuruma	kùtètá
669	blood *-gadi, (n)yiŋga	043	amalaso	màgàzi	màgàzì	βwáámbà	obwamba	màlásó
433	bone *-kupa	044	igufa	ìgùfwà	ìgùfwá	ìgúfwà	eigufa	ifùhá/màfùhá
17	breast *-beede	061	iβeele	màbèélè	màβèélè	màβéélè, itútù/màtútù	eibeere	màbéélè
679	child, infant *-yana, -yanake	026	umwana	mùkékò, mwàáná	mwàáná	mùkèkà, mwàànà	omwana	mwááná
305	cloud *-dunde	068	igiho	màlùùndè	ilùùndè	ilùùndè	ekicwi	ikùúsì/màkùúsì
465	cold *-pepo	077	imbeho	mpèhó, βàlílí	mpèhó	βàlílì	embeho	mpéhó
624	come *-yij-	095	-za	kwìizà	kwìizà	kwìizà	kwija	kwìisà
471	cook (vt)*-dug-, -teek-	086	guteeka	kùtèékà	kùtèékà	kùtéékà	kucumba	kùtèékà
622	dark, black *-yidʊ, -piipi?	022	ilaβula	-pì, βwìilàbùlé	iyéépi	kwìilàgùlà	omwirima	-fiitilé, -fiité <kùfiità
682	daytime *-cɪ, -jʊba	079	umutaaga	mwìzyòòbà	mwìzyòòβá	ihάáŋgwè	omushana	isʊʊβá
425	die *-ki-, ku-	091	-pfa/-hwela	kùfwá	kùfwá	kùfwà	kuf(w)a	kùfwá

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**iGiHa (DJ66)**	**SiSùùmbwà SiSilòòmbò**	**SiSùùmbwà SiYòòmbè**	**KiLòòŋgò**	**RuHyoza (EJ22e)**	**KiTòòŋgwè KiBèndè**
60	dog *-bʊa	030	imbwa	mbwá	mbwá	éémbwà	embwa	iimbwá
448	drink (vt)*-nu-	083	ukunywa	kʊ̀nwá	kʊ̀ŋwá	kùnywà	kunywa	kùnywá
563	ear *-tʊi, -kʊtʊ	048	ugutwi	kʊ̀twí	kùtwí	kùtwì	okutwi	itwí
156	eat *-dɪ-	084	ukudya	kùlyá	kùlyá	kùlyà	kulya	kùlyá
273	egg *-gɪ	039	igi	igí/màgí	igì/màgì	iyááyì/màyá áyì	eihuli	ijí/màjí
620	eye *-yico	049	idyiiso	liinsó/màásyó	liinsó/mìinsó	liinsò/mèèns ò	eliisho	liínsó/méénsó
652	feather *-yoya	042	ugwoya	màzòzá	màzòòzà	βwòòyà	ebishanda	màfùùmbú, ìnyèlé
323	fingernail *-jada	054	uluzaala	lyàálá	lyàálà	lyàálà/màálà	empambo	lùsálá/nsálá
474	fire *-yoto, -dɪdo	070	umulilo	mùlílò	mùlílò	mùlílò	omuliro	mùlílò/mìlílò
126	fish *-comba, -cuɪ	028	inswi	mfwí, nsàmàákì ?	mfwí	èémfwì	emfuru	iséémbé/màséémbé
1028	fly (vi) *-pap-, -gʊdʊk-	093	-guluka	kùgùlùkà	kùgùlùkà	kùgùlùkà	kuharara	kùyùlùkà
449	give *-pa, -yiŋk	100	-ha	kùhá	kùhá, kùfùmyá	kùhà	kuha	kùhá
269	go *-gi-, -yend-	094	-genda	kùzyà	kùzyà	kùgèèndà	kugenda	kùjà
758	good *-yija	020	-iza	mfùlá	nsògá	màzìmá	-rungi	nsògá
409	great, big, powerful *-kʊdʊ	014	-kulu	mùkʊ̀lʊ́	ŋkùlú	ihάáŋgò	-haŋgo	-kùlú
702	hair *-yuɪdɪ, -yuede	045	uluzwili	mùsàsí	mùsàsì	isòkè	eishoke	nyèlé
603	he, she *-kʊe, -ye(e)	003	wene/nyene	áwénè	áwé	wènyénè	wenene	ùyò, yóyòlí
356	head *-tʊe	046	umutwe	mùtwé	mùtwé	mútwè	omutwe	mùtwé/mitwé
623	hear *-yigu-, -teg-	088	-umva	kwiimvá	kwòòmvwá	kùhúlílà	kuhulira	kúhùlìká
543	heart *-kodo, -tɪma	047	umutima	mwìizò	mwìizò	mùgányà	omwoyo	mwèèyò/myèèyò
707	horn, ivory *-pembe	040	ihembe	ihèèmbè	ihèèmbé	ihéémbè	eihembe	ihéémbé lyá nsòfù
1016	I *-ne	001	je (we)	ònè	òné	inyè	inye	ùùnè
218	kill *-yit-, -bʊd(ag)-	092	-ica	kwiitá	kwiitá	kwiitá	kwita	kwihàáyá
348	knee *-dui, -du	056	ivi	sìví	sìvwí	chízwì/mázwì	okujwi	ijùùŋgò

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**iGiHa (DJ66)**	**SiSùùmbwà SiSìlòòmbò**	**SiSùùmbwà SiYòòmbè**	**KiLòòŋgò**	**RuHyoza (EJ22e)**	**KìTòòŋgwè KiBèndè**
626	know *-man(i)-	089	-menya	kùmànìà	kùmànìà	kùmànyà	kumanya	kùmànyà
1025	leaf *-yani	034	iβaβi	màtùútú	itùútú	iβàβi/màβàβi	ekibabi	lyáányí/máányí
310	leg, foot *-gʊdʊ	055	kugulu	kùgùlù/màgùlù	kùgùlù/màgùlù	kùgùlù/màgùlù	okuguru	kùɣùlù/màɣùlù
1024	liver *-tɪma	062	igitiku	itìmá	itìmá	ìtìmà	omwirima	itìmá
144	long/tall *-deepu, -tadɪ, -de	016	-leshe	bùlèèlé	ilèèlé	ilèèlè	-la	ilèèhé
1023	louse *-nyumba	031	enda	ndá	ndá/ídá	èèndà	enda	ìíndá
226	male, man, husband *-koci	024	umugaβo	igòòsyá	igòòsyá, mùgòósyá	ìséèzà/màsèèzà	omushaija	ŋgòòsí
793	many *-yiŋgɪ	011	inshi	-iiŋkí	-iiŋkí	nyííŋgì	-iŋgi	-iiŋgí
596	meat *-(n)yama	038	inyama	nàmà	nàmà	èènyàmà	nyama	inyàmà
1030	milk *-beede	082	amata	màbèélè	màβèélè	àmátè	amata	màβéélè
716	moon *-yedi	064	ukweezi	kwèèzì	kwèèzí	kwèèzì	omwezi	mwéénsí
717	mountain *-gʊdʊ, -dʊndʊ	076	umusozi	mùgàlà	mùgàlà, lùgùlù	iβàáŋgà	eibaŋga	mùsòsì/mìsòsì
1026	mouth *-domo	051	umunwa	mùlòmò	mùlòmò	mùnwà	munwa	mùlòmò/mìlòmò
281	name *-yina	080	izina	izìíná	izìíná	izíínà	eibara	isííná
379	neck *-ki(i)ŋgo	059	izosi	ŋkìíŋgó	ŋkííŋgó	bíchà	ebikya, -ŋgoto	ìkòsì/màkòsì
962	new *-pɪa	019	-shaasha	nyhàáhyà	nyhyááhyà, ihyááhyà	ènyhyàhyà	-hya	nyhyá
718	night *-tikʊ	078	ijolo	bwiilé	wìilé	chìlò	ekiro	bùfúkú
484	nose *-pʊda, -jʊdʊ, -yɪdo	050	izuulu	nìíndó	nìíndó	ènyííndò	enyindo	inyííndó
435	oil *-kuta	081	amavuta	màfùtá	màfùtá	màzútà	amajuta	màfùtá
410	old *-kʊdʊ	018	-zehe	ndàálà	ilàálà	-áá kàlè	-kulu	lyà kàlè
440	one *-mo	012	-mwe	imwi	ìimwi	ímwè, kàmwè	emo	ímwì
325	path *-jɪda	075	inzila	nzìlà	nzìlà	mùháándà	omuhanda	nsìlà
558	person *-ntʊ	027	umuntu	mùùntù	mùùntù	mùùntù	omuntu	mùùntù

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**iGiHa (DJ66)**	**SiSùùmbwà SiSilòòmbò**	**SiSùùmbwà SiYòòmbè**	**KiLòòŋgò**	**RuHyoza (EJ22e)**	**KiTòòŋgwè KiBèndè**
76	rain (n) *-buda	067	imvula	mvùlá	mvùlá	èènzùlà	enjura	(i)mfúlá
169	root *-di	035	umuzi	mùzi	mùzi	mùzi	omuzi	mùsísí/misísí
95	sand *-caŋga	073	umushenyi/um useŋga	mùsèèŋgà	mùsèèŋgà	mùsèèŋgà	omushenye	mùsfínsí/misfínsí
251	say *-bʊɪd-	099	-vuga	kùbwĭílà	kùwĭílà	kùɡààmbílà	-gamba	kùbálílá
770	see *-bon-	087	-βona	kùβònà	kùβònà	kùlèèβà	kubona	kùlòlà
67	seed *-beyʊ, -bʊto	033	imbuto	mbùtó, mbègù	mbùtó, βʊ̀tùùŋgà	mbĭβò	empambo	mbútó
434	short *-kupɪ	017	-gufi	nĭĭhí	nĭihí	-gùfù	gufi	ntófú
615	sing *-yɪmb-	098	-lilimba	kwĭĭmbá	kwĭĭmbá	kùzinà	-hooya	kwiimbá
627	sit *-yikad-	097	-icala	kwiikàlísyà	kwiikàlisyà	kwiikàlisà	kushuntama	kwiikàlà
123	skin *-koba, -kanda, -dɪdɪ?	037	ulushaato	ndĭlí	ndĭlí	ikòβà	oruhu	ikóbá/màkóbá
136	sleep (vi)*-daad-, -gon-	090	-humila	kùgònà	kùtìindílà	kùlyámà	kunagira	kùɣònà, kùáálà tùló
1021	small *-niini	015	-toyi	ndõ	ndó	iké	-ke	-nsé, -sé
629	smoke *-yoki	069	umwosi	lyòònsí	lyòònsí	mùhìlíŋkà	omwika	lyóónsí
69	soil *-doŋgo	072	iβivu	βùlòòŋkó	βùlòóŋkò	ìtàkà	eitaka	bùlóóŋgò
1029	stand *-y ɪm(ɪdɪd)-	096	-hagalala	kwiimilílà	kwĭĭmìĭlílà	kwèèmèlèlà	kwemeerera	kwiimílílà
735	star *-tondua, -yo(n)ti	065	inyoota	nsòòndá	nsòòndá	ènsóóndè	enyanyiinyi	lùtááŋgwà/ntááŋgwà
61	stone *-bʊe	074	iβuye	iβààlé	iβàálé	iβáálè/màβáálè	eibaale	iβwè/màbwè
333	sun *-jʊba	063	izuuβa	izyòòβá	izyòòbá	izóóβà	eizooba	isyóóβá/màsyóóβá
360	tail *-kɪda	041	umuliizo	mùsĭlá	mùsilá	mùchilà	omukira	mùsílá/misílá
1020	that *-da/e, -dɪa, VCVo	009	-dya	èbyò, èyò	ìyò	èlyò	-o	-lyélèlí
54	they *-bo	006	βene	àβé	àβé	βònyénè	boonene	βèènè

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**iGiHa (DJ66)**	**SiSùùmbwà SiSilòòmbò**	**SiSùùmbwà SiYòòmbè**	**KiLòòŋgò**	**RuHyoza (EJ22e)**	**KiTòòŋgwè KiBèndè**
166	tongue *-dɪmi	053	ululimyi	lùlímí	lòlǐmì	lùlímì/èèndì mì	orulimi	lùlímí/ndímí
267	tooth *-yino	052	idyiinyo	líinó/míinó	líinó/míinó	líinò/méénò	eliino	líinó/méénó
540	tree *-tɪ	032	igiti	mútì	mùtí	mùtí	omuti	sìtí/fítí
752	two *-bɪdɪ	013	-βili	íβili	íβìlí	íβilì	ibiri	íβílí
322	water *-jɪ	066	amaazi	míinzí	míinzí	mǐínzì	amaizi	màànsí
1017	we -cʊe, -cue, -yitue	004	twe (bwe)	ífwé	ífwé	ichwè	icwe	ùùfwè
919	what *-kɪ	007	iki	βíindé	βíindé, èsí	chíhâ	-ki	nísí
610	white *-yedʊ	023	-ela	yèpé	lyèépè	kwèèlà	kwera	-áápé
918	who *-nani	008	inde	éndè	éndé	òhâ	owa	gànyí
339	woman, wife *-ke, kadi	025	umugolegole	mùkǐímá	mùkází, mùké	mùkázì	omukazi	mùkásí
15	you (sg) (thou) *-be	002	we (we)	òβé	òβé	iwè	iwe	ùùgwè
1018	you (pl) (ye) *-mʊe, -nue	005	mwe (mwe)	ímwé	ímwé	ímwè	inywe	ùùmwè

Appendix 4. Lexicostatistics 100 word-list: G42d, G11, F23

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**KiSwahili (KiSanifu)**	**CiGogo**	**KìmùnàSùkùmà**	**JinàKìíyâ**	**GìnàNtùzù**
133	abdomen, stomach *-da	058	tumbo	nda	ndà, ɳhùùmbǐ	ndâ, ɳhùùmbǐ	ɳhùùmbǐ
926	all *-(n)ce, -yona	010	-ote	-ose	-pyè	pyé, -òòsê	-òòsê
55	arm, hand *-kono, -boko	057	mkono	muwoko	ŋkònò	ŋkònõ	ŋkònò
337	ashes *-bu	071	majivu	ivu	màβù	íβũ/màβũ	íβú/màβù
297	back (n)*-gonɡo	060	mgonɡo	mugonɡo	ŋgòŋgò	ŋgòòŋgò	ŋgòòŋgò
27	bad *-bɪ	021	-baya	-bi	-βì	-βĭ	-àà βòβì
1022	bark *-koba	036	gome	ibada	igòólà, ìgàámbà	ígõlà	ihààŋgò
811	bird *-yoni, -nyoni, -dege	029	ndege, nyuni	ndeje	nòni	nôni	nòni

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**KiSwahili (KiSanifu)**	**CiGogo**	**KìmùnàSùkùmà**	**JinàKìĭyâ**	**GĭnàNtùzù**
125	bite *-dʊm-	085	-uma	-luma	-lùmà	gòlùmà	gòlùmà
669	blood *-gadi, (n)yiŋga	043	damu	sakami	mĭnĭĭŋgâ	mĭnĭĭŋgâ	mĭnĭĭŋgâ
433	bone *-kupa	044	mfupa	ifupa	ĭgùhà	ĭgùhă/màgùhă	ĭgùhà
17	breast *-beede	061	maziwa	itombo	ndùtù, lònòònô, mbèèlê	lòβèèlê, lònòònhô	nòònô
679	child, infant *-yana, -yanake	026	mtoto, mwana	mwana	ŋwèèlèélè, nĭgĭnĭ, ŋwàànà	ŋwàànă, nĭgĭnĭ, ŋwèèlèélè	ŋwàànà, nĭgĭnĭ, ŋwèèlèélè
305	cloud *-dunde	068	mawiŋgu	ivunde	ilùùndè	ĭlùùndè/málùùndè	ilùùndè
465	cold *-pepo	077	baridi	mbeho	lònyilì, mbèhò	mbèhõ	mbèhò
624	come *-yij-	095	-ja	-za	-ìzà	gwĭzà	gùzà
471	cook (vt)*-dug-, -teek-	086	-pika	-vua/-teleka	-zùgà	gòzùgà	gòzùgà
622	dark, black *-yidʊ, -piipi?	022	-eusi < -yelu pi	-titu	yààpi	giitĭ, -pì	-pì
682	daytime *-cɪ, -jʊba	079	mchana	misi	lĭĭmì	lĭĭmĭ	lĭĭmì
425	die *-ki-, ku-	091	-fa	-fwa	-chà	gòcă/clă	gòchà
60	dog *-bʊa	030	mbwa	mbwa	mvà [ɱvà]	mvà /ɱvă	mvà [ɱvà]
448	drink (vt)*-nu-	083	-nywa	-ŋwa	ŋwà	gòŋwà	gòŋwà
563	ear *-tʊi, -kʊtʊ	048	sikio	ikutu	gòtò	gòtõ	gòtò
156	eat *-dɪ-	084	-la	-lya	-lyà	gòlyă/lià	gòlyà
273	egg *-gɪ	039	yai/mayai	igaŋkʰa	igĭ	ĭgĭ/màgĭ	igĭ/màgĭ
620	eye *-yico	049	jicho/macho	liso	lìisò/mìlsò	lìisõ/mìsõ	lìisò
652	feather *-yoya	042	manyoya	iweha	βòòyà	βòòyă	βòòyà
323	fingernail *-jada	054	ukucha	lukombe	lyààlà	lùààlă/lwààlă/njààlă	lyààlà
474	fire *-yoto, -dɪdo	070	moto	moto	mòòtò	mòòtõ	mòòtò
126	fish *-comba, -cuɪ	028	samaki	somba	ndĭĭlô	shĭ	shĭ, ndĭĭlô
1028	fly (vi) *-pap-, -gudʊk-	093	-ruka	-guluka	-làlà	gòlàlă	gòlàlà
449	give *-pa, -yiŋk	100	-pa	-pela	-iinhâ	gwĭnhâ	gùnhâ
269	go *-gi-, -yend-	094	-enda	-bita	-jà	gòjà/gòjià	gòjà
758	good *-yija	020	-zuri	-swanu	yà wiizà	-sògă, -ìză	nsògà, -àà βùzà

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**KiSwahili (KiSanifu)**	**CiGogo**	**KìmùnàSùkùmà**	**JinàKìîyâ**	**GìnàNtùzù**
409	great, big, powerful *-kʊdʊ	014	-kubwa, -kuu	-vaha	ɲhàálè/-tàálè	-kʊ̀lʊ̌, -tàálè, dùmà	-tàálè/nhàálè
702	hair *-yʊɪdɪ, -yuede	045	nywele	mvwili	lʊ̀ywɪ̀ìlɪ̂	nzwɪ̀ìlɪ̂	isiinzi
603	he, she *-kʊe, -ye(e)	003	yeye	mwene	wèèì	wèèí	wèèí
356	head *-tʊe	046	kichwa	itwe/mutwe	ntwè	ntwɛ̌/mitwɛ̌	ntwè
623	hear *-yigu-, -teg-	088	-sikia	-hulika	-ìigwà	gwɪ̀gwǎ	gùgwà
543	heart *-kodo, -tɪma	047	moyo	nt^{h}umbula	ɲhòlò, mòòyò	ɲhòlʊ̌	ɲhòlò
707	horn, ivory *-pembe	040	-pembe	ihembe	mhèèmbè	ìpèèmbɛ́	mhèmbè
1016	I *-ne	001	mimi	ane/nene	nèènè	nèènē	nèènè
218	kill *-yit-, -bʊd(ag)-	092	-ua	-ulaga	-βʊ̀làgâ	gʊ̀βʊ̀làgâ	gʊ̀βʊ̀làgâ
348	knee *-dui, -du	056	goti/magoti	ifugamilo	ìzwì	ìzwī	ìzwì
626	know *-man(i)-	089	-jua	-manya	-mànà	gʊ̀mànà	gʊ̀mànà
1025	leaf *-yani	034	jani/majani	ihanze/ihaɱp^{h}a	ìdʊ̀ʊ́tʊ̀	ìdʊ̀ʊ́tʊ̀	ìdʊ̀ʊ́tʊ̀
310	leg, foot *-gʊdʊ	055	mguu	mugulu	gʊ̀gʊ̀lʊ̀/màgʊ̀lʊ̀	gʊ̀gʊ̀lʊ̀/màgʊ̀lʊ̀	gʊ̀gʊ̀lʊ̀/màgʊ̀lʊ̀
1024	liver *-tɪma	062	ini/maini	itoga	ìtɪ̀mà	ìtɪ̀mǎ	ìtèmà
144	long/tall *-deepu, -tadɪ, -de	016	-refu	-tali	ndɪ̀ɪ̀hù	-lɪ̀hʊ̌	ndɪ̀pù, nɪ̀pú
1023	louse *-nyumba	031	chawa	mp^{h}ani	ndá	ndǎ	ndá
226	male, man, husband *-koci	024	-dume	mulume	ŋgʊ̀ʊ́shà	-gʊ̀ʊ́shà, ìbéhī	ɲhʊ̀ʊ́shà
793	many *-yiŋgɪ	011	-ingi	-inji	nyìiŋgʊ̀	-ɪ̀ɪ̀ŋgɪ̀	niiŋgì
596	meat *-(n)yama	038	nyama	nyama	nyàmà	ɲàmà, nàmà	nyàmà, nàmà
1030	milk *-beede	082	maziwa	mele	màβɛ̀ɛ̀lê	màβɛ̀ɛ̀lê	màβɛ̀ɛ̀lê
716	moon *-yedi	064	mwezi	mwezi/mleŋge	ŋwɛ̀ɛ̀jì	ŋwɛ̀ɛ̀jì	ŋwɛ̀ɛ̀zì
717	mountain *-gʊdʊ, -dʊndʊ	076	mlima, kichuguu?	itunda/igoŋgo	lʊ̀gʊ̀lʊ̀	lʊ̀gʊ̀lʊ̀	lʊ̀gʊ̀lʊ̀
1026	mouth *-domo	051	mdomo	mlomo	nʊ̀mʊ̀	nʊ̀mʊ̀	nʊ̀mʊ̀
281	name *-yina	080	jina	itagwa	liìnà	liìnǎ	liìnà
379	neck *-ki(i)ŋgo	059	shingo	singo	nhiìŋgʊ̀	nhiìŋgʊ́	nhiìŋgʊ̀

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**KiSwahili (KiSanifu)**	**CiGogo**	**KìmùnàSùkùmà**	**JinàKìîyâ**	**GìnàNtùzù**
962	new *-pɪa	019	-pya	-hya	mhyà	-pyà	mhyà
718	night *-tiku	078	usiku	cilo	βòjikǔ	βòjikǔ	βòzìkò
484	nose *-puda, -judu, -yɪdo	050	pua	mp^{h}ula	lyòòlò	lyòòlŭ, nìîndó	lyòòlò
435	oil *-kuta	081	mafuta	mafuta	màgùtà	màgùtà	màgùtà
410	old *-kudu	018	kuukuu	-zehe	ŋhòlòkókò	-kòlòkólò	ŋhòlòkólò
440	one *-mo	012	moja	-moŋga	ìmô	-ìmô	ìmô
325	path *-jɪda	075	njia	nzîla	nzîlà	nzîlà	nzîlà
558	person *-ntu	027	mtu	muɲt^{h}u	mùùnhò	mùùnhò	mùùnhò
76	rain (n) *-buda	067	mvua	mvula	mbùlà	mbùlà	mbùlà
169	root *-di	035	mzizi	mdela	njì	nzwì/mìzwì	nzì
95	sand *-caŋga	073	mchaŋga	muhaŋk^{h}a	màsénì	sàáŋgàsàáŋgà, màsâlò	sàáŋgàsàáŋgà
251	say *-bɪɪd-	099	-sema, -ambia	-loŋga/-ti	-wîîlâ	gòwîîlâ	gòwîîlâ
770	see *-bon-	087	-ona	-wona	-βònà	gòβònà	gòβònà
67	seed *-beyu, -buto	033	mbegu	mbeyu	mbìyò, mbègù ?	mbìyŏ	mbìyò
434	short *-kupɪ	017	-fupi	-fupi	ŋgùhî	-gùhî	ŋgùhî
615	sing *-yɪmb-	098	-imba	-imba	-ìîmbà	gwîîmbà	gwîîmbà
627	sit *-yikad-	097	-kaa	-ikala	-ikàlà	gwìgàáshà	gògìîshâ
123	skin *-koba, -kanda, -dɪdɪ?	037	ŋgozi	nciŋgo	ìkòβà, ndìlì	ìkòβă, ndìlî	ìkòònzà, ndìlì
136	sleep (vi)*-daad-, -gon-	090	-lala	-gona	-tiindîlà	gòlàálâ	gòshiitòlà
1021	small *-niini	015	-dogo	-dodo	ndò	-dólòlò, -dòó	ndólòlò, ndŏ
629	smoke *-yoki	069	moshi	lyosi	lyòòchì	lyòòcî, gùbèhă (vt)	lyòòchì
69	soil *-doŋgo	072	udoŋgo	iloŋgo	βòliindò	βòlòóŋhò	βòlòóŋgò
1029	stand *-y ɪm(ɪdɪd)-	096	-simama	-ima	-ìîmíîlà	gwìîmă, gwìîmíîlà	gwìîmíîlà
735	star *-tondua, -yo(n)ti	065	nyota	nyelezi/ntondwa	sòòndà	sòòndă	sòòndà
61	stone *-bue	074	jiwe/mawe	ibwe	iwè	ìwè (pl. màwè)	iwè/màwè
333	sun *-juba	063	jua	izuva	lìîmì	lìîmî, lyòòßă	lìîmì

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**KiSwahili (KiSanifu)**	**CiGogo**	**KìmùnàSùkùmà**	**JinàKìîyâ**	**GìnàNtùzù**
360	tail *-kɪda	041	mkia	mucila	ŋkǐlà	ŋkǐlà	ŋkǐlà
1020	that *-da/e, -dɪa, VCVo	009	ile	-la	ìyò	ìyò	-yò, -chò, -βò
54	they *-bo	006	wao	vene/wawo	βòòì	βòòyí, βò	βòòì
166	tongue *-dɪmi	053	ulimi	lulimi	lòlîmì/ndîmì	lòlîmî	lòlîmì/ndîmì
267	tooth *-yino	052	jino/meno	lino	liìnò	liìnò/mìnò	liìnò/mìlnò
540	tree *-tɪ	032	mti	muti/ibici	ltíntì	ntî	ltíntî
752	two *-bɪdɪ	013	mbili	-ijete	-βìlí	ìβìlí	ìβìlí
322	water *-jɪ	066	maji	maleŋga	mìînzì	mìînzî	mìînzí
1017	we -cue, -cue, -yitue	004	sisi	sese/ase	βìisè	(y)iisê	βisé
919	what *-kɪ	007	nini	cici	kí	kíí/kíí(y)ì/kíì?	kíîyì
610	white *-yedu	023	-eupe <yelu pe	-elu	-ààpè	-ìîlõ, -pé	-àápè
918	who *-nani	008	nani	nani	nááni	nàànî/náàni?	ùyàlí(hè)
339	woman, wife *-ke, kadi	025	mwanamke	mudala	ŋkǐímà	ŋkẽ	ŋkè
15	you (sg) (thou) *-be	002	wewe	gwegwe/agwe	βèèβè	βèeβẽ	βèèβè
1018	you (pl) (ye) *-mue, -nue	005	ninyi/nyinyi/nyie	nyenye/anye	βìiŋwè	(y)iiŋwẽ	βìiŋwè

Appendix 4. Lexicostatistics 100 word-list: F22, G62

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**KìDàkámà**	**KìNyànyèèmbè**	**KìKònòòŋgò**	**SìGàlàgàànzà**	**iKiHehe**
133	abdomen, stomach *-da	058	ndà	ndà	ndà	ndà	lilemɛ
926	all *-(n)ce, -yona	010	-òósè	wòósè	-ósè	-òósè	-mbe-li
55	arm, hand *-kono, -boko	057	kìkónó	kòβòkó	gòkónó	kòβòkó	liwoko
337	ashes *-bu	071	iβú/màβú	màtùùndè	màwú	ivú/màvú	kifu
297	back (n)*-gongo	060	m(ù)gòòŋgò	mùgòòŋgò	m(ù)gòòŋgò	mùgòòŋgò	mugoŋgo
27	bad *-bɪ	021	-βí	-βí	-βí	iβi	-vi
1022	bark *-koba	036	igólà	ìgólà	igólà	igólà	libande

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**KìDàkámà**	**KìNyànyèèmbè**	**KìKònòòŋgò**	**SiGàlàgàànzà**	**iKiHehe**
811	bird *-yoni, -nyoni, -dege	029	nònì	nyònì	nònì	nyònyì	kidege
125	bite *-dʊm-	085	-lùmá	-lùmá	-lùmá	-lùmá	-luma
669	blood *-gadi, (n)yiŋga	043	m(ù)gàzì	m(ù)gàzì	m(ù)gàzì	mùgàzì	danda
433	bone *-kupa	044	igùhá	igùhá	igùhá	ìfùpá	kisege
17	breast *-beede	061	màβéélê, màdùtú	màβèélé	màβéélè	màβéélè	liveele
679	child, infant *-yana, -yanake	026	ŋwàáná	mwàáná	mwàáná, kàkèké	mwàáná	mwana
305	cloud *-dunde	068	ilùùndè	ilùùndè	ilùùndè	ilùùndè	lifufu
465	cold *-pepo	077	mbèhó	mbèhó	mbèhó	mbèhó	-sisimu
624	come *-yij-	095	-ìizà	-ìizá	-ìizà	-ìizà	-sa
471	cook (vt)*-dug-, -teek-	086	-zùgá	-tèékà	-tèékà	-tèékà	-teleka
622	dark, black *-yidʊ, -piipi?	022	yàápì	-pì, -làβózú	-pì, wìláβózú	-àápì, ìláβólé	-titu
682	daytime *-cɪ, -jʊba	079	lìmì hágátì	hàápé	lyʊ̀ʊ̀βá	múlyʊ̀ʊ̀βá	munyi
425	die *-ki-, ku-	091	-fá	-fwá	-fwá	-fwá	-fwa
60	dog *-bʊa	030	iwá, mbwá	mbwá	mbwá, mbwégésé, m(ù)kwíyíyí	mbwá	mbwa
448	drink (vt)*-nu-	083	-ŋwá	-nywà	-ŋwá	nywà	uku-nywa
563	ear *-tʊi, -kʊtʊ	048	itwí	itwí	itwí/màtwí	ìtwí, màtwí	lisikisa, lipulikilo
156	eat *-dɪ-	084	-lyá	-lyà	-lyá	-lyà	-lya
273	egg *-gɪ	039	igí/màgí	igí/màgí	igì/màgì	igí	likaŋa
620	eye *-yico	049	liisó	liinsó/mìinsó	liinsó/màànsó	liinsó/mìinsó	liiho
652	feather *-yoya	042	màyòyá	wòòyá	màyòyá	βòòyá	lugala
323	fingernail *-jada	054	lònòóŋgá	nzàálá	nòóŋgá	lòzàlá/nzàlá	lunyove
474	fire *-yoto, -dɪdo	070	mòòtó	mòòtó	mòòtó	mùlilò/mòòtó	moto
126	fish *-comba, -cuɪ	028	ndìílô	sàmáki ?	nsòómbá, nswì	nsàmáki, nsòómbà	somba
1028	fly (vi) *-pap-, -gudʊk-	093	-làlá	-lʊ́ʊ́kà	-làlá	-gʊ̀lʊ̀kà	-guluka, -gulunduka
449	give *-pa, -yiŋk	100	-iinhá	-pá	-pá	-pá, -péélézyà	-pela

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	KìDàkámà	KìNyánYèèmbè	KìKónòòŋgò	SiGàlàgàánzà	iKiHehe
269	go *-gi-, -yend-	094	-já	-yà	-yà	-yà	-bita
758	good *-yija	020	-sògá	-sògá	nsògá	nsògá	-nofu
409	great, big, powerful *-kudu	014	ihánvâ	-hánvà	ŋkúlú, -kùlú	-kùlú, -hànyá	-komi
702	hair *-yuidi, -yuede	045	lòywìílì	lùnyélè/nyélè	lònyélè/nyélè	lònyélé	fwilli
603	he, she *-kue, -ye(e)	003	wèéi	mwènìkílí	mwènìkílí	àáwé	mwene
356	head *-tue	046	mùtwé	mùtwé	m(ù)twé	mùtwé	mutwe
623	hear *-yigu-, -teg-	088	-iigwá	-iigwá	-dègélèkà	-iigwá	-pulika
543	heart *-kodo, -tima	047	mòòyò ?, hòlò	mòòyò ?	m(ù)tìmà	mòòyò	numbula
707	horn, ivory *-pembe	040	ipèémbé	ipèémbé	ipèémbé	ipèémbé	lupembe
1016	I *-ne	001	nèèné	èèné	nèèné	èèné	nene
218	kill *-yit-, -bud(ag)-	092	-βòlágâ	-wòlágà	-wòlágà	βòlágà	-wulaga
348	knee *-dui, -du	056	izwí	iyòŋgò	iyùŋgò	-	lifugamilo
626	know *-man(i)-	089	-mànyà	-mànyà	-mànyà	-mànyà	-lukagula
1025	leaf *-yani	034	idòótò	idòótò	idótò	itíintà	liharnba
310	leg, foot *-gudu	055	kògòlò	m(ù)gòlò	mùgòlò, migòlò	kògòlò/màgòlò	ligulu
1024	liver *-tima	062	itèmá/itìmá	itìmá	itìmá	itìmá	mutima
144	long/tall *-deepu, -tadi, -de	016	liihù	ndìihù	-liihú	ntàlí	-tali
1023	louse *-nyumba	031	idá/ndá	mpànì	mpànì	idá/màdá	lisonsoli
226	male, man, husband *-koci	024	igóóshà	-góóshà	igóósyà	m(ù)góósyà	umunyidama
793	many *-yingi	011	-iŋgí	nyìŋgí	nyìiŋgí	nyìŋgí	-olofu
596	meat *-(n)yama	038	nyàmà	nyàmà	nyàmà, kànyúúŋgò kòòmù	nyàmà	nyama
1030	milk *-beede	082	màβèélè	màβèélè	màβèélè	màβéélè	lisiva
716	moon *-yedi	064	ŋwèèzí	mwèèzí	mwèèzí	mwèèzí	mwesi
717	mountain *-gudu, -dondu	076	lògòlò	lògòlò	-lògòlò	lògòlò	kidunda
1026	mouth *-domo	051	mùlòmò	mùlòmò	m(ù)lòmò	mùlòmò	mulomo
281	name *-yina	080	liiná	liiná	liiná	liiná	litawa

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**KiDàkámà**	**KìNyànyèèmbè**	**KiKònòòŋgò**	**SiGàlàgàànzà**	**iKiHehe**
379	neck *-ki(i)ŋgo	059	nhìíŋgó	hìíŋgó	hííŋgó	ikòsì	siŋgo
962	new *-pɪa	019	-pyà, -gènì	mpyá	m(ù)pyà	-pyà	-pya
718	night *-tiku	078	βòzìkớ	ùzìkó	βòzìkó	βòfùkú	kilo
484	nose *-puda, -judu, -yɪdo	050	nìíndó	nyííndó	nìíndó	nyííndó	meŋelo
435	oil *-kuta	081	màgùtá	màfùtá	màgútá	màfùtá	mafuta
410	old *-kudu	018	-kòlókólò	-à kálè	ikùùkùù, lyàkálé	-kòókóò	-gogolo, -vaha
440	one *-mo	012	lómò	yímò	yímò, sòòló	íímò	-mwi
325	path *-jɪda	075	nzìlà	nzìlà	nzìlà	nzìlà	ŋasi
558	person *-ntu	027	mùùnhò	mòòntò	mùùntò	mùùntù	munu
76	rain (n) *-buda	067	mbùlá	mvùlá	mbùlá	mvùlá	ndonya
169	root *-di	035	mùzi	m(ù)zi	m(ù)zi	mùzi	ludela
95	sand *-caŋga	073	m(ù)sèèŋgélà	mùsèŋgàsèŋgà	m(ù)sèŋgàsèŋgà	mùsèèŋgà	luhaŋga
251	say *-bɑɪd-	099	-wíílâ	-wíílà	-wíílà	-βwíílà	tigila
770	see *-bon-	087	-βònà	-wònà	-wònà, -lííŋgá	-βònà	-wona
67	seed *-beyu, -buto	033	lòβìyớ	mbìyớ	mbìyớ	mbùtó	inyadikwa
434	short *-kupɪ	017	ŋgùhí	ŋgùhí	ŋgùhí	sífùpí, -gùhí	-fupi
615	sing *-yɪmb-	098	ìímbá	-ìímbá	-ìmbà	-ìímbá	-imba
627	sit *-yikad-	097	-íìkàlà	-íkàlà	-íkálà	-íikálà	-tengemala
123	skin *-koba, -kanda, -dɪdɪ?	037	ndìlí, ndìlíí	ndìlí	ndìlí	ndìlí	nyiŋgo
136	sleep (vi)*-daad-, -gon-	090	-làálâ, -tiindílâ	-làálà tòló	-làálà	-làálà	-gonelela, -vasa
1021	small *-nɪnɪ	015	ndó	ndó	ndò	sìdò	-dodo
629	smoke *-yoki	069	lyòòchí	lyòŋki	lyòki	lyòònsí	lyusi, lisusi
69	soil *-doŋgo	072	βòlòóŋgò	òlòóŋgò	òlóóŋgò	βòlóóŋgò	luganga
1029	stand *-y ɪm(ɪdɪd)-	096	-íímá	-íɪrɪá	-íímá	-íímá	-ima
735	star *-tondua, -yo(n)ti	065	sòòndá	sòòndá	sòndá	nsòòndá	inyenyesi
61	stone *-bue	074	iwè	iwè/màwè	iwè	iβwè	liganga
333	sun *-juba	063	líìmí	lyòòβá	lyòòβá	lyòòβá	lisuva
360	tail *-kɪda	041	mùkìlá	mùkìlá	mùkìlá	mùsìlá	mukila

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**KìDàkámà**	**KìNyànyèèmbè**	**KìKònòòŋgò**	**SìGàlàgàànzà**	**iKiHehe**
1020	that *-da/e, -dɪa, VCVo	009	ìyò	ííyò	iyò	iyò	-la
54	they *-bo	006	βòòí	βèníkílí	ààwò	àβò	vene
166	tongue *-dɪmi	053	lòlìmí	lòlìmí	lòlìmí	lòlìmí	lulimi
267	tooth *-yino	052	liinó	liinó/miinó	liinó/miinó	liinó/miinó	liino
540	tree *-ɪi	032	mòtí	mùtí	m(ù)tì	mùtì	libiki
752	two *-bɪdɪ	013	iβílí	iβílí	iβílí	iβílí	-vili
322	water *-jɪ	066	miinzí	mìínzí	miinzí	miinzí	luleŋga
1017	we -cue, -cue, -yitue	004	yiiswé	iiswé	yiiswé	ifwé	hwehwe
919	what *-kɪ	007	kí	kí	kí	síí	kiki
610	white *-yedo	023	yàápé	yàápé	mwèèló, yàápé	nyèèlú	-elu
918	who *-nani	008	náání	nàáni	ìnàání	ndèé	nani
339	woman, wife *-ke, kadi	025	mùkíímà	m(ù)kíímà, m(ù)ké	m(ù)kíímà	mùkíímà	umukimama
15	you (sg) (thou) *-be	002	βèèβé	èèβé	βèèβé	èwé	veve
1018	you (pl) (ye) *-mue, -nue	005	iiŋgwé	iiŋwé	yiiŋwé	ímwé	nyenye

Appendix 4. Lexicostatistics 100 word-list: I·31, I·32

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**KìnàUshòòlà**	**KìniLàámbà**	**KìnìHàánzù**	**GìRwana**	**GiAhi**	**yìnyàMùnyiŋányi**
133	abdomen, stomach *-da	058	ndà	ndàà	ndà	ndà	ndà	ndà
926	all *-(n)ce, -yona	010	swè, túlwé	swèè	ìhí	nyòòŋè	-òòŋè	nyòòŋè
55	arm, hand *-kono, -boko	057	mòkónò	mòkónò	mòxònò	mòxònò	mòxònò	mòkònò
337	ashes *-bu	071	màù	màù	màù	màù	màù	màù
297	back (n)*-gonga	060	mùgòòŋgò	mògòòŋgò	mògòòŋgò	mòɣòòŋgò	mùɣòòŋgò	mùɣòòŋgò
27	bad *-bɪ	021	mbí	mbí	ibì	mbí	iβí	mbí

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**KìnàUshòòlà**	**KìníLàámbà**	**KìnìHàánzù**	**GìRwana**	**GìÁhì**	**yìnyàMùnyìŋànyì**
1022	bark *-koba	036	-	gyóè	ìgáámbà	ìbàdá	ìbàádá	ìbàdà/màbàdà
811	bird *-yoni, -nyoni, -dege	029	nòní	nòní	nyònyì	nyòònyì	nyòònyì	nyòònyì
125	bite *-dɔm-	085	kòlúmà	kòlúmà	kòlùmà	òrùmá	òrúmá	òrùmà
669	blood *-gadi, (n)yiŋga	043	mìgàlî	mìgàlí	nsàkàmì	sàyàmì	sàyàmì	sàyàmì
433	bone *-kupa	044	kúpà	kyúpà	ìkúpà	ìkùtà	ìyúfá	ìkùɸà
17	breast *-beede	061	mbélélé	mbélèlè	ìyèèlê	mbéè	ìvéè, òvéè/màvéè	màànyà
679	child, infant *-yana, -yanake	026	mwàánà	mwáánà	ŋwàánà, mùŋènyà	mwàànà	mwáánà, mòŋìnyà	mùjìimbà, mwàànà
305	cloud *-dunde	068	lùùndè/màlùùndè	lùùndè	ilùùndè	ìrùùndè	ìyùùndè	ìrùùndè
465	cold *-pepo	077	mpépò	mpépò	mpèpò	òryòkû	mpèɸò	mpééɸó
624	come *-yij-	095	kòìízà	kòìízà	kìzà	òjà	òòjà	òjà
471	cook (vt)*-dug-, -teek-	086	kùlúgà	kùlúgà	kòlùgà	òrùyá	òRéxà, òrùyá	òòyà
622	dark, black *-yidɔ, -piipi?	022	nzílò	nzílò	ndwàálò	jóríkì	-iilò, njiilò	jóRikì
682	daytime *-cɪ, -jɔba	079	múúnsì	mónsì	mòŋwè	mòòmwì	mòòmwí	mùùmwì
425	die *-ki-, ku-	091	kòkíà	kòkíà	kòshà	kùyà	kùyà	kùyà
60	dog *-bɔa	030	mbúà	mbúá	mbwà	mbwá	mbwá	mbwá
448	drink (vt)*-nu-	083	kòkòpà	kòkòpà	kòŋwà	nywá	ónywá	nywá
563	ear *-tɔí, -kɔtɔ	048	kòtóì	kìtóî	kòtwî	kòRwî	gìRwí	ikòRwè
156	eat *-dɪ-	084	kòlyà	kòlyà	kòlyà	òlá	òòlyá	òlà
273	egg *-gɪ	039	gì/màgì	gyî	ìjìè/màjiè	ilyè/màlyè, ìyì/màyì	ìîyí	ìryè/màryè
620	eye *-yico	049	liíso/miíso	liíso/miíso	liihó/miihò	liihò/miihò	liihó	riihò/miihò
652	feather *-yoya	042	màúli	màúli	nzòyà	njòòyà	màjòòyà	màβòrì
323	fingernail *-jada	054	kúlùkùlù	lòkúlùkùlù	lòkùlókòlò	òkúkù	òhùúhù	òkùúkù
474	fire *-yoto, -dɪdo	070	móótò	mòótò	mòòtò	mòòRò	mòòRò	mòòRò
126	fish *-comba, -cuɪ	028	nsàmáki ?	nsií	nsìî	sàmáki ?	sóómbá	sóómbá

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**KìnàUshòòlà**	**KìniLààmbà**	**KìnìHàànzù**	**GìRwana**	**GìÀhi**	**ɣìnyàMùnyiŋànyi**
1028	fly (vi) *-pap-, -gudʊk-	093	kòpùpùtà	kòpùpùtà	kòpùtà, kòlùmà	òrùmà	òrùmà	òrùmà
449	give *-pa, -yiŋk	100	kòpéélà	kòpéélà	kòpùnyà, kòpà	pá ?	òfá	dʊ́ʊ́yà
269	go *-gi-, -yend-	094	kùyééndà	kòlóóŋgòlà	kòlòŋgòlà	èèndà	òwèèndà	gwèèndà
758	good *-yija	020	mùùzâ	mùkééndè	nzìzà	njìjà	òòjá	jiɣànà
409	great, big, powerful *-kʊdʊ	014	-kólò	ŋkólò	ŋkòlò	kʊ́ʊ́	ŋkʊ́ʊ́	ŋkʊ́ʊ́
702	hair *-yuɪdɪ, -yuede	045	lòtúúmbì	lòtùùmbì	lòsìiŋgà/nsìiŋgà	òRúkà/ntúkà	òjíì	òtùkà
603	he, she *-kʊe, -ye(e)	003	òyò	òyò	ŋwèènsò	mwèèsò	mwésó	mwèèsò
356	head *-tʊe	046	túé	túè	itwè/mitwè	iRwè	iRwé/ màRwé	itwè
623	hear *-yigu-, -teg-	088	kùíigyà	kòigyà	kìjà	Rààyà	Rèɣèà	Règèà
543	heart *-kodo, -tɪma	047	ŋkólò	ŋkólò	ŋkòlò	ŋxóó	ŋxóó	ŋkóó
707	horn, ivory *-pembe	040	lòpéémbè/màpéémbè, òr mpéémbè	lòpéémbè	lòpèèmbè, ìpèèmbè/ màpèèmbè	òféémbé, mpéémbé	òféémbé	òɸèèmbè
1016	I *-ne	001	íínè	ìnè	nèèné	nìînì	nèènè	nèènè
218	kill *-yit-, -bʊd(ag)-	092	kwíyólàgà	kòyólàgà	kòwòlágà	òòláɣà	òòláɣà	òòráɣà
348	knee *-dui, -du	056	lúú/màlúú	lúù	ìlù	ìlù	ìlú/màlú	ìrù
626	know *-man(i)-	089	kòmànà	kòmànà	kòmànyà	òmànyà	òmànyà	òmànyà
1025	leaf *-yani	034	lókà	lókà	itòòtô	iRóRò	iRóRò/ màRóRò	itʊ́tò
310	leg, foot *-gʊdʊ	055	mògòlò/mìgòlò	mògòlò	mùgòlò/mìgòlò	mòɣòò	mòɣòò	mòɣóò
1024	liver *-tɪma	062	tyímà	tyímà	itìmà/màtìmà	iRìmà	iRímá	itìmà
144	long/tall *-deepu, -tadɪ, -de	016	lyíípù	lyíípù	lòlìpù	ndífú	líífú, ndíífú	ndífú
1023	louse *-nyumba	031	mpàni	mpàni	mpàni	ndà	ndá	ndà
226	male, man, husband *-koci	024	mògóóshà	ŋgòóshâ	igòhà	mòɣòósyà	mòɣòósyà	ŋgòósà
793	many *-yiŋgɪ	011	ííŋgì	nííŋgì	idó	nyìiŋgí	-iiŋgí	-iiŋgí
596	meat *-(n)yama	038	nàmà	nàmà	nyàmà	nyàmà	nyàámà	nyàámà

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	**KìnàUshòòlà**	**KìníLàámbà**	**KìnìHàánzù**	**GìRwana**	**GìÀhí**	**ɣìnyàMùnyiŋànyì**
1030	milk *-beede	082	màsúónsú, màsúóŋgâ	màsùònsò	màsúónsò, màèèlê	mààyà, màhùòŋgá	màáyá	màáyà
716	moon *-yedi	064	mwéélì	mwéélì	ŋwèèlî	mwèèlí	mwéélí	mwèèrì
717	mountain *-gudu, -dundu	076	mùlímà	ŋkóóŋkò	lùgùlò	gìɣòòŋgò	gìRàántò	ŋòòŋgò
1026	mouth *-domo	051	mùlòmò	mùlòmò	mùlòmò	mwòòmò	mwòòmò	mwòòmò
281	name *-yina	080	liínà	liínà	liínà	liìná	lííná	rììnà
379	neck *-ki(i)ŋgo	059	ŋkííngò	ŋkííngò	ŋhììngò	ŋkììngò	ŋkííngó	ŋkììngò
962	new *-pia	019	mpyâ	mpià	mpyà	ifyà	-fyá	mpyà
718	night *-tiku	078	òtíkò	òtíkò	òtìkò	òRíxò	òRíkó	òRìkò
484	nose *-puda, -judu, -yido	050	mpòlà	mpòlà	mpòlà	mpólà	mpóá	mpòòrà
435	oil *-kuta	081	màkútà	màkútà	màkùtà	màkùRà	màxúRá	màkùtà
410	old *-kudu	018	ŋkólòkòlò	ŋkólòkòlò	ŋkòlókòlò	ikóò, ìxòòmbi	líhíílé	àxàèŋgè
440	one *-mo	012	kàámwî	kàmwî	kàŋwì	ìmwè	ímwè	gámwè
325	path *-jida	075	nzîlà	nzîlà	nzîlà	njià	njià	njià
558	person *-ntu	027	mòòntò	mòòntò	mòòntò	mòòntò	mòòntò	mòòntò
76	rain (n) *-buda	067	mbúlà	mbúlà	mbúlà	mbùlà	mbùà	mbùrà
169	root *-di	035	mòlì/mìlì	mòlì/mìlì	mùlì	mòòyî	mwìílì	mòòryî
95	sand *-caŋga	073	múnsàáŋgâ	múnsàáŋgà	mìhàáŋgàhàáŋgà	màhálò	ihàáŋgàhàáŋgà	màhàŋgàháŋgà
251	say *-buid-	099	kòyíílà	kòyíílà	kòkwîìlâ	hánìà	hánìà	òxánìà
770	see *-bon-	087	kòyónà	kòyónà	kòònà	gòònà	òònà	òònà
67	seed *-beyu, -buto	033	mbéò	mbéò	mbèò	mbèyò	mbééyó	mbèèyò
434	short *-kupi	017	kúpî	kúpî	ŋkùpì	kùfî	kùfí	ŋkùpì
615	sing *-yimb-	098	kòyíímbà	kòyíímbà	kììmbà	gììmbà	íímbá	wììmbà
627	sit *-yikad-	097	kòkíkàlàánsà	kòkíkàlàánsà	ikìî	ixàà	íxáá	gìxàà
123	skin *-koba, -kanda, -didi?	037	ndìlî	mùkóónzà	ndìlì	ndìì	-	mòkòònjà

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	KìnàUshòòlà	KìníLàámbà	KìnìHàánzù	GìRwana	GìÀhí	ɣìnyàMùnyiŋànyi
136	sleep (vi)*-daad-, -gon-	090	kùgònà ndóólò	kùgònà ndóólò	kòlàálà tòlò	òráà	ráá Ròó	òráá tóó
1021	small *-niini	015	níínò	níínò	níínò	nyòyò	nyóí	nyòòyò
629	smoke *-yoki	069	lyóóki	lyóóki	lyòòkí	yòòki	yòòxi	yòòki
69	soil *-dongo	072	òlòòŋgô	òlòòŋgô	òdòòŋgò	òròòŋgò	fàáŋí	òròòŋgò
1029	stand *-y ɪm(ɪdɪd)-	096	kùyímìkà	kùyímìkà	kímíkà	iβíxà	ímíxá	ímíkà
735	star *-tondua, -yo(n)ti	065	nsòòndâ	nsòòndâ	nzótà	njòRà	njòRà	njòRà
61	stone *-bʊe	074	gùè/màgùè	gùè/màgùè	igwè/màgwè	igwè/màgwè	igwè	igwè/màgwè
333	sun *-juba	063	pàsô/mpàsô	nzówà	lyòòwà	lyòòβà	yóóβà	lyòòβà
360	tail *-kɪda	041	màkílà	màkílà	mùkílà	ifúúmbú	òfóómbó	ìfòòmbò
1020	that *-da/e, -dɪa, VCVo	009	ìyò	níásò, ìyò	ìyò	iyó	-ló, -yó	ìsî
54	they *-bo	006	àyô	áàsìò, ìò	èènsò	-êèsò	βèèhsò	βèèhò
166	tongue *-dɪmi	053	lòlímì/nímì	lòlímì	lòlímí/ndìmí	òlímì	òlímí	òrímí
267	tooth *-yino	052	líínò/míínò	líínò/míínò	líínò/míínò	líínò	líínó/míínó	ríínò/míínò
540	tree *-tɪ	032	kyótà/màkòtà	kyótâ	mùtí/mití	múRí	màRí	màáRé
752	two *-bɪdɪ	013	kàbílì	kàbílì	íbílì	-βíí	ívílì	íβíì
322	water *-jɪ	066	máází	máází	màzí	mààjí	mààjí	mààjí
1017	we -cʊe, -cue, -yitue	004	ishé	isiè	sèèsè	sèèsè	sèèsè	sèèsè
919	what *-kɪ	007	yáání	yàáni	ntòònî	ntóóní	ntóóní	ntóóní
610	white *-yedʊ	023	mwéélò	nzèlò	nzélò	-éèlò	-èèló	njèèrú
918	who *-nani	008	wáání	wàáni	nyàànyû	nyàányù	àányù	àányù
339	woman, wife *-ke, kadi	025	màsúúŋgò	màsúúŋgò	màsòòŋgò	màxémà	màxémà	màxémà
15	you (sg) (thou) *-be	002	ówè	ówè	wèèwé	βèéβé	βééβè	βèèβé
1018	you (pl) (ye) *-mʊe, -nue	005	ínyè	iniè	nyèènyé	nyèènyé	nyéényé	nyényé

Appendix 4. Lexicostatistics 100 word-list: M31, F24, G42d, G11, F24, F25, F33, F34

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	ɪKɪNyakyusa	KìKíímbò-N	KìKíímbò-S	ìCíWòòŋgò	KiiRàngi	KèèMbùwè
133	abdomen, stomach *-da	058	lwanda	ndà	ndà	èndà	ìɪ̀ndà	ndà
926	all *-(n)ce, -yona	010	-osa	-óósè	wòósè	yèèsì	òòsì	-óónsè
55	arm, hand *-kono, -boko	057	kɪboko	múxónò/míxónò	mùxónò	ónkónò/ɪ̀míkónò	múkónò	mòXónò
337	ashes *-bu	071	ʊmfwandɪlo	máù	máù	ɪtwìɪtwɪ	ɪ̀vù	yùú
297	back (n)*-gonɡo	060	ɪnyuma	mùgòónɡò	mùgòòŋgò	mùgòòŋgò	mwòòŋgò	mòòŋxò
27	bad *-bɪ	021	bɪbɪ	íbɪ̀	ibɪ̀	ìwì	yàvéhà	kìví
1022	bark *-koba	036	kandi	ipátà	ipátà	ìgàámbà	ìkòkò	jólà
811	bird *-yoni, -nyoni, -dege	029	njʊni	nyónyì	nyònyì	ìnòònì	ndèè	mírè
125	bite *-dʊm-	085	-lʊma	kólùmà	kólùmà	kóùmà, kówàwà	kòlùmà	òlómà
669	blood *-gadi, (n)yiŋga	043	ilopa	mùgàzì	cháájì	òlàándà	sàkàmì	mwààrì
433	bone *-kupa	044	kɪfupa	íkùpà	ikúpà	ífùpà/mɪ̀fùpà	ikúfà	kúfà
17	breast *-beede	061	ibeele	máβèélè	máβèélè	màwèèlè	màtòòmbò	màsìí
679	child, infant *-yana, -yanake	026	mwana	mwàánà	mwáánà	òmwáánà ndù	m(ù)sííŋgà	mwàánà
305	cloud *-dunde	068	ibɪŋgu	ìlùùndè	ìlùùndè	ìkòòmbɪ̀, ìwɪ̀ɪ̀ŋgò	ɪ̀chò	dùùndè/màdù ùndè
465	cold *-pepo	077	mbepo	mpèpò	mpèpò	ɪ̀mbèpò	mpèhò	mpéfò
624	come *-yij-	095	-isa	kwííjà	wííjà	wíízà	kòòjà	òòjà
471	cook (vt)*-dug-, -teek-	086	-pɪja	kótèéxà	kòtèéxà	kòtèlèèkà	kòrúwà	òtérèkà
622	dark, black *-yidʊ, -piipi?	022	-titʊ	-àápì	nyɪ̀tɪ̀lò	nyìlò	njɪ̀rò	mwèìràmà
682	daytime *-cɪ, -jʊba	079	musɪ	lyóónsɪ̀	lyòònsɪ̀	òmsánà ŋkòlò	mùùsí	mònsékàtì
425	die *-ki-, ku-	091	-fwa	kùgùlàálà	kùchà	kòfwà	kòkúyà	kúyà
60	dog *-bʊa	030	mbwa	mbwà	mbwà	ɪ̀ɪ̀mbwà	kòrí	dìyó
448	drink (vt)*-nu-	083	ʊkʊnwa	kòŋwà	kòŋwà, kòŋwéélà	kòmwèèlà	kùnywà	òònyá

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	ɪKɪNyakyusa	KìKíímbò-N	KìKíímbò-S	ìCíWòòŋgò	KiiRàngi	KèèMbùwè
563	ear *-tʊi, -kʊtʊ	048	mbʊlʊkʊtʊ	ítwì/mátwì	ítwì	íkóótwi (of animals), ìsikílò (of humans)	kòtò	kótò
156	eat *-dɪ-	084	-lya	kólyà	kúlyà	kòkòdyá	kòryà	rá
273	egg *-gɪ	039	ifumbɪ	ìgí/màgí	ìgí	ìyì/mààyì	ìyì	yààí/mààyí
620	eye *-yico	049	liso	lìisò/mìisò	lìisò	lìisò/àmìisò	riisò	riísò/màísò
652	feather *-yoya	042	ijoja	wòóyà	màgálà, wààgi	àmàwéyà	bààèrà	mbúúyé
323	fingernail *-jada	054	kyala	ínòòŋgà	ìwààlà	inìŋgwà	mpààhà	lòjálà
474	fire *-yoto, -dɪdo	070	moto	mòòtò	mòòtò	òndìlò/mìindìlò	mòòtò	mòótò
126	fish *-comba, -cuɪ	028	nswi	nsìpà	ínshì	ìshwì	sàmááki ?	nsíyé
1028	fly (vi) *-pap-, -gʊdʊk-	093	-pululuka	kòŋyááŋxà, kòpàpàmúxà	kòdíixà	kólòkà	kòhólòkà	òfàlàlà
449	give *-pa, -yiŋk	100	-pa	kópéélà	kòpéélà	kòòmbà	kòtóólà	òfá
269	go *-gi-, -yend-	094	-bʊka	kòyà	kòyà	kòwàálà	kòdùmà	òfétà
758	good *-yija	020	nʊnʊ	wósògà	nsògà	nòònù	yà bòòhà	kèèjá
409	great, big, powerful *-kʊdʊ	014	-nywamu	ikòlò, ihányà	íkòlò	ikòlò	kóólò	kìnénè
702	hair *-yuɪdɪ, -yuede	045	lunywili	lònyéè/nyélè	nyéélè	ìnyéélè	lòjwíílì	njérè
603	he, she *-kʊe, -ye(e)	003	mwene	ŋwèènè	mwèènè	mwèènè	yèèí	wèé
356	head *-tʊe	046	ʊntʊ	mútwè	ítwé	òòntwè	mùtwè	mòtwé
623	hear *-yigu-, -teg-	088	-pɪlɪka	kòtègéélà	kòtègéélà	kòkwìirwà	kòtéérà	òtéérà
543	heart *-kodo, -tɪma	047	ndʊmbʊla	mòóyò	mòòyò ?	òmòòyò	mòtìmà	ŋkólò
707	horn, ivory *-pembe	040	lʊpembe	lìinò, ípèèmbè	lìinò, ipèèmbè	ípèèmbè/ mápèèmbè	mpèèmbè	mpéémbé
1016	I *-ne	001	ʊne	nèènè	ònéénè	néénè	nèènè	nèénè
218	kill *-yit-, -bʊd(ag)-	092	-goga	kówòlágà	kòwòlágà	kòkómààŋgà	kòólàà	wòólá
348	knee *-dui, -du	056	ifundo	iyòòŋgò/ máyòòŋgò	ìilù	igóóti/màgóóti ?	ichóómèrò	kìírù
626	know *-man(i)-	089	-manya	kómányà	kòmányà	kòmàánà	kòtáángà	ómányà

No	*Language variety ☛ PB and Gloss ⇓*	*S/N*	ɪKɪNyakyusa	KìKíímbò-N	KìKíímbò-S	ɪCíWòòŋgò	KìiRàngi	KèèMbùwè
1025	leaf *-yani	034	lyani	ìtìtì	ìtìtì/mátìtì	màsòòtè	ìsààmbí	sààmbí
310	leg, foot *-gʊdʊ	055	kɪlunde	mùgòlò/mìgòlò	mùgólò/mìgólò	ìchìnámà/ìmìnámà	kʊ̀ʊ̀lò/màʊ̀lò	kʊ̀ʊ̀lò/mʊ̀ʊ̀lò
1024	liver *-tɪma	062	kɪnɪe	ìtémà	ìtèmà	ìtìmà/màtìmà	ìtìmàʊ̀	tímà
144	long/tall *-deepu, -tadɪ, -de	016	-talɪ	-lìihù	kʊ̀tàlì	ndàání	ndíhì	ndìì
1023	louse *-nyumba	031	ŋgolo	mpàní	mpáni	ìsʊ̀ʊ̀mì	nyìiŋgìrì	mpʊ́tì
226	male, man, husband *-koci	024	nyambala	igòóshà	igwíishà	ìlùmè	mʊ̀lùmè	lʊ́mè, nyáámbà
793	many *-yiŋgɪ	011	-iŋgɪ	nyííŋgì	nyííŋgì	ínìinjì	ìréfù	nyìiŋgí
596	meat *-(n)yama	038	nyama	nyàmà	nyàmà	ìnyàámà	nyàmà	nyàmà
1030	milk *-beede	082	lʊkama	máβèélè	màβéélè	àmáwèélè	màsʊ̀ʊ̀sʊ́	màsìí
716	moon *-yedi	064	mwesi	mwéélì	mwéélì	ʊ̀mwéézì	mwèèrì	mwèérì
717	mountain *-gʊdʊ, -dʊndʊ	076	kyamba	lʊ̀gʊ̀lʊ̀	kìtʊ́ʊ́ndà	kìtʊ̀ʊ̀ndà	lʊ̀ʊ̀lʊ̀	mwèèmbí
1026	mouth *-domo	051	nkanwa	mʊ̀lʊ̀mʊ̀	mʊ̀lʊ̀mʊ̀	ʊ̀ndʊ̀ʊ̀mʊ̀	mʊ̀lʊ̀mʊ̀	mʊ̀lʊ̀mʊ̀
281	name *-yina	080	ɪŋgamu	líínà	líínà	ìlìinà	ìrìnà	rìínà
379	neck *-ki(i)ŋgo	059	makosi	ŋkììŋgò	íŋkììŋgò	ìsììŋgò	ŋkììŋgò	nchííŋgò
962	new *-pɪa	019	-pya	mpyà	mpyá	ìɪ̀mbyà	nsyà	kífèfé
718	night *-tikʊ	078	kɪlo	βʊ́tìkù	βʊ́tìkʊ̀	ʊ̀sìkʊ̀	ʊ̀chíkʊ́	ʊ̀tíkù, nʊ̀tíkù
484	nose *-pʊda, -jʊdʊ, -yɪdo	050	mbulo	mpʊ́là	mpʊ̀ʊ̀là	ìɪ̀mbʊ̀là	mpʊ̀là	mpʊ̀là
435	oil *-kuta	081	mafuta	mákùtà	mákùtà	màfùùtà	màkùtà	màkútà
410	old *-kʊdʊ	018	kʊlʊ	nsáxàlʊ̀, ìxámà, lyà xálè	nsáxàlʊ̀	ìkààlì	hàsàkààlà	nswààlá
440	one *-mo	012	-mo	lʊ́mʊ̀	ìmwí	ìɪ̀mwì	ìmʊ́dʊ̀	mʊ̀ʊ̀ntí
325	path *-jɪda	075	njɪla	njɪ̀là	njɪ̀là	ìzɪ̀là	njɪ̀rà	njèrà
558	person *-ntʊ	027	mundʊ	mùúntʊ̀	mùúntʊ̀	ʊ̀ʊ̀ndʊ̀/àwàándʊ̀	mʊ̀ʊ̀ntʊ̀	mʊ̀ʊ̀ntʊ́
76	rain (n) *-buda	067	ɪfula	mbùlà	mbùlà	ìvùlà	mbùlà	mbúlà
169	root *-di	035	ʊnsi	mùlì	mùlì	ìkwáázò	mùrì	mórì
95	sand *-caŋga	073	ʊnsaŋga	mùsèŋgàsèèŋgà	βʊ̀lʊ́ʊ́ŋgʊ̀	ʊ̀lʊ̀sááŋgà	sálʊ̀	mʊ̀sààŋgà

No	*Language variety ☛ PB and Gloss ⇩*	*S/N*	ɪKɪNyakyusa	KìKíímbò-N	KìKíímbò-S	ìCíWòòŋgò	KiiRàngi	KèèMbùwè
251	say *-bʊɪd-	099	-ti	kʊ̀wìílà	kʊ̀wíílà	kʊ́wìílà, kʊ́pʊ̀ʊ̀jà	wíírà	ʊ̀wéérà
770	see *-bʊn-	087	-bona	kʊ̀wʊ̀nà	kʊ́wʊ̀nà	kʊ̀lʊ̀là	kwʊ̀ʊ̀nà	wʊ̀ʊ́nà
67	seed *-beyʊ, -bʊto	033	mbejʊ	mbèèyʊ̀	mbèèyʊ̀	ìmbèyʊ́	mbèèyʊ́	mbéʊ́
434	short *-kupɪ	017	-pimba	-kʊ̀pɪ̀	íkʊ̀pɪ̀	ínìpì	ŋkúfì	ŋkúfè
615	sing *-yɪmb-	098	-ɪmba	kwíímbà	kwìɪmbà	kwíímbà	kwìɪmbà	wèèmbà
627	sit *-yikad-	097	-tʊgala	kwiixàlà	kwiixàlà	kwiikàlà	kwiikàlà	wèikálà
123	skin *-koba, -kanda, -dɪdɪ?	037	mbapa	ntíílà	ntíílà	ìŋgwèèmbè	ndírì	mbèró
136	sleep (vi)*-daad-, -gon-	090	-gona	kʊ̀gʊ̀nà ndʊ̀ʊ́lʊ̀	kʊ̀gʊ̀nà	kʊ̀kʊ̀nà ʊ̀tʊ̀lʊ̀	kʊ̀láálà tʊ̀lʊ̀	ʊ̀lálà tʊ̀lʊ̀
1021	small *-niini	015	-nini	-dʊ̀	kádʊ̀kàdʊ̀	ìchì	ndúúdì	kìdídí
629	smoke *-yoki	069	lyosi	lyʊ́ʊ́kì	lyʊ́ʊ́ki	ìjʊ́ʊ́shì	mʊ̀ʊ̀kyì	mʊ̀ʊ́kì
69	soil *-dɔŋgɔ	072	mfu	ʊ̀lʊ́ʊ́ŋgʊ̀	ʊ̀lʊ́ʊ́ŋgʊ̀	ilʊ́ʊ́ŋgʊ̀	irʊ̀ʊ́ŋgʊ̀	nsálʊ̀
1029	stand *-y ɪm(ɪdɪd)-	096	-ɪma	kwíímà	kwìɪmìlílà	kwíímìlílà	kwìɪmà	wèémà
735	star *-tondua, -yo(n)ti	065	ɪndondwa	nsʊ̀ʊ̀ndà	njʊ̀tà	ífízʊ̀tà	nyényèèri	njʊ̀tà
61	stone *-bʊe	074	ibwe	ibwè/màbwè	ibwè/màbwè	iwè/màwè	iβùyè	wèè/màwèè
333	sun *-jʊba	063	isʊba	lyʊ́ʊ́nsɪ̀, wáápè	lyʊ́ʊ́nsɪ̀	ʊ́nzʊ̀wà	mwàásʊ́	jʊ́ʊ́và
360	tail *-kɪda	041	ʊnswigala, ɪmbikipiki	múkɪ̀là	múkílà	ʊ̀nchɪ̀là	mùkɪ̀rà	mʊ̀kérà
1020	that *-da/e, -dɪa, VCVʊ	009	-la	ìyʊ̀	ìyʊ̀	yílà	(kɪ̀)-là	kérá
54	they *-bʊ	006	bene/babo	ìwʊ́	ìwʊ́	àwèènê	vʊ̀ʊ̀vʊ̀	vʊ̀ʊ́
166	tongue *-dɪmi	053	lʊlɪmɪ	lʊ́lìmì/ndìmì	lʊ̀límì	ʊ̀ʊ́límì/índìmì	lʊ̀rɪmì	lʊ̀rémè/ndémì
267	tooth *-yino	052	lino	líínʊ̀/míínʊ̀	líínʊ̀/míínʊ̀	ilìínʊ̀/àmìínʊ̀	iyʊ̀ʊ̀	yéʊ̀/máʊ̀
540	tree *-ɪɪ	032	mpɪkɪ	mútì	ipíkì	íkwì	mùtì	mʊ̀té
752	two *-bɪdɪ	013	-bɪlɪ	jiβílì	jiβílì	ùwílì	ivɪ̀rì	ivèrè
322	water *-jɪ	066	misi	mííjì	mííjì	máázì	màájì	màájì
1017	we -cʊe, -cue, -yitue	004	ʊswe	iiswè	swèèswê	shwééshwè	sʊ̀ʊ̀sʊ́	síyè
919	what *-kɪ	007	ɪfikɪ	kíí	kɪntʊ̀ kí	chìndʊ́ chì	ché	kíkí
610	white *-yedʊ	023	-elʊ	yèèlù, yàápè	mwèèlú	ìnéélʊ̀	njèrù	njérʊ̀
918	who *-nani	008	likʊ/jwani	ánàànù	ánáání	ʊ́ nàánù	ánié	ányú

No	*Language variety ☛ PB and Gloss ↓*	*S/N*	ɪKɪNyakyusa	KiKíímbò-N	KiKíímbò-S	iCíWòòŋgò	KiiRàngi	KèèMbùwè
339	woman, wife *-ke, kadi	025	nkikulu	múkìímà	mùkìímà	ónchímà	móókyé ?	móká
15	you (sg) (thou) *-be	002	ugwe	βèèβè	wèèwè	òwééwè	wèèwè	wèèwè
1018	you (pl) (ye) *-mue, -nue	005	umwe	ìímwè	nywèènywè	mwéémwè	nyùúnyù	nyè

CENTRE FOR NFLD. STUDIES
JUL 18 1978
MEMORIAL UNIVERSITY
OF NEWFOUNDLAND